BUS. ADM.

JUN 10 .. 55

BUS. ADM.

June 1955

Management

# methods

PRACTICAL SOLUTIONS TO MANAGEMENT'S PROBLEMS

How much is your business worth?

Psychology can help you select executives

How to sell an inventions plan to your employees

They modernized instead of building

ROUTE No pages

See pages

To see pages To see pages



© GF Co. 1954

# GF raises your lobby's TF\*

Smart-looking GF METAL FURNITURE creates a lasting favorable impression on clients, customers and other callers

GOODWILL begins with good first impressions in your reception room. GF's distinguished metal desks, tables, chairs and lounges reflect the qualities of good taste, modern style and efficiency that speak well for your organization.

You are no longer restricted to sober gray or green in GF metal furniture. GF desks and files may be had in an array of bright decorator colors, with aluminum trim. Goodform aluminum chairs are furnished in ebony, gold, bronze-gold or copper.. anodized non-chip colors that are infused into the aluminum itself Smart upholstery patterns and colors can match or contrast, as you prefer.

The Mode-Maker desk shown above is designed for utility as well as appearance. With appropriate GF desk accessories, your receptionist can also handle correspondence, file cards, operate dictating equipment, or type. All these features—plus handsome styling—will cost only a fraction of 1% of its user's salary over a period of 15 years!

Why not make your reception lobby as modern and efficient as your own ideas suggest? Just call or drop in at your nearest GF showroom . . . or, to get a complete catalog in color, simply write The General Fireproofing Company, Dept. M-45, Youngstown 1, Ohio.



MODE-MAKER DESKS • GOODFORM ALUMINUM CHAIRS • SUPER-FILER MECHANIZED FILING EQUIPMENT • GF ADJUSTABLE STEEL SMELVING

# Management methods

Publisher

President

Jerome W. Harris

William S. Kline

#### Editorial Staff

Editor: J. W. Harris

Managing Editor: Ira J. Bilowit

Art Director: Laurence Lustig

Editorial Consultant: Leslie M. Slote

#### **Business Staff**

General Mgr.: W. S. Kline
Advertising Mgr.: Charles L. Dermott
Western Adv. Mgr.: William S. Hutchings
Office Mgr.: Edith Pagnotta

#### Advertising Offices

New York 17—141 East 44th Street, MU 7-0583
Chicago 11—612 North Michigan Avenue,
DElaware 7-0112
Los Angeles 5—Robert W. Walker Co., 2330 West Third
Street, Dunkirk 7-4388
San Francisco 4—Robert W. Walker Co.,
57 Post Street, Sutter 1-5568

A publication of MANAGEMENT MAGAZINES, INC. 141 East 44th Street, New York 17, N. Y., MU 7-0583

President and Treasurer, W. S. Kline; Vice President and Secretary, J. W. Harris; Vice President, A. J. Kaiser.



Member of Business Publications Audit

SUBSCRIPTIONS: In United States and Possessions, one year \$5.00. Canada, one year \$6.00. Single copies \$.50. Copyright, 1955 by Management Magazines, Inc. Accepted for mailing under Section 34.64 P.L.&R. at United States Post Office, East Stroudsburg, Pa.

Would you like to order

# Management METHODS

for others in your company?
Use the postpaid reply card
bound in this issue.

Good metal business furniture is a good investment

Circle 722 for more information)

#### **FEATURES**

How much is your business worth?	13
How to sell an inventions plan to your em-	
ployees	15
How peripheral charting simplifies the devel-	
opment of a clerical system	19
How to insure profits, double employee in-	21
come	21
Psychology can help you select executives	24
Form reduces delinquent account checking .	33
How to modernize your old office building	39
Where they work: Leo Cherne	44
How to make the right decision	48
Important new development bridges the gap	
between duplicating and copying	49
Compensation for overtime exempt personnel	50
How centralization and electronic systems re-	
sult in one-day order processing	51
Profit sharing accounting	58
rioni andring decodining	20

#### **DEPARTMENTS**

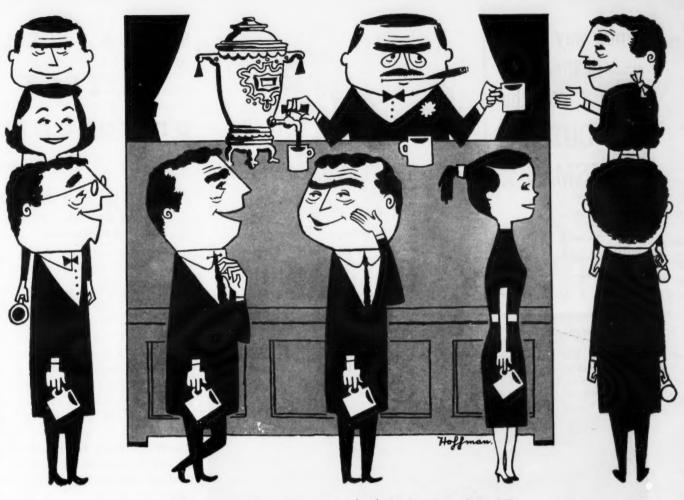
Tax tips: Test yourself on recent tax court	
cases	4
Consensus: Electronic briefs worth repeating	8
Sales ideas: Is distribution becoming too	
selective in smaller firms?	11
Diagnostics for management	31
Thought starters:  How to integrate vacations into a plant shutdown	34
Automatic letter writing dictation saves \$10,000 annually	
Promotion announcements add prestige, increase morale	
One writing on "shingled" form records data on correct sheets	
New system reports firm's shortage problems faster	
How timing will improve the impact of one-shot advertising	
Firm originates expense-paid pension plan for employees	
Planning ideas:  Chart details requirements for furni- ture rests	46
Machines make wrapping material from used cartons	
Magnets replace old-tashioned door stops	
Clippings: New products for the office	54
Cover Photo: General American Life Insurance	

Policy re manuscripts: The object of MANAGE-MENT METHODS is to offer "practical solutions to management's problems." For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists as well as from active businessmen at all levels of management.

Most articles employ case histories. An article may be based on a single case history or can be built around a group of related case histories. We like to mention the name of the user company involved in each case history.

We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.



"Great system—Gets everybody in by ten o'clock"

# Keep the coffee-break in your control

You could control the "coffeebreak" this way—but fortunately, there's a much better method available.

Rudd-Melikian, Inc. can provide complete control of the "coffee-break" at no cost to management.

R-M dispensers—completely

automatic—serve delicious, hot Kwik-Kafé coffee, cold Coca-Cola, Pepsi-Cola, Minute Maid orange juice or soft drinks. "Coffee-break" time is reduced to a minimum and workers remain in their own work area. Service is supplied by your local factory-trained R-M distributor.

Remember—you don't have complete control unless you have

Kwik-Kafé. Clip the coupon —write us today!



wik afe'	RUDD-MELIKIAN,	INC.
afe' ®	RUDD-MELIKIAN,	INC.

CREATORS OF AN INDUSTRY

(Circle 751 for more information)

	elikian, Inc., . Howard St., Phila. 22, Pa.
Gentlem	nen:
the	se show me how to control "coffee-break" with R-M ensers, Booklet MM 2.
Name.	
Street.	
City	Zone State

A new way of life in the office for the **OUTSIDE SALESMAN** 



OFFICE-ettes



Sales Department Installation Hope's Windows, Inc. Jamestown, N. Y.



Quartered in his own separate Arnot OFFICE-ette, the outside salesman is free from unnecessary distraction while doing his telephoning and paper work, the quicker to get back on the selling path; also, he has a place to receive those customers who call - two reasons why many business organizations have found that sales departments equipped with Arnot OFFICE-ettes and PARTITION-ettes\*† have paid off in increased efficiency and productivity!

Write and arrangements will be made for a demon stration of this time-and-energy-saving Arnot OFFICE

ARNOT-JAMESTOWN DIVISION

AETNA STEEL PRODUCTS CORPORATION Jamestown. New York (Circle 706 for more information)

# tax tips TEST YOURSELF on recent tax court cases

#### THE QUESTION

Are all legal fees paid for services rendered in reducing liabilities deductible as ordinary and necessary expenses for the production of income?

#### THE FACTS

The taxpayer separated from his wife after 21 years of marriage, and entered into a written separation agreement under which he consented to make certain specified payments to his wife. A subsequent divorce decree incorporated the previously entered into separation agreement, and the taxpayer dutifully made periodic and regular payments to his former wife until her remarriage eight years later. He then refused to continue these payments contending that his obligations under the agreement terminated at the time of his former wife's remarriage.

Disagreeing, the taxpayer's wife brought an action in the New York Supreme Court to recover the sum she alleged was due. The Supreme Court

decided in her favor, and on appeal to the Appellate Division of the Supreme Court, the wife was again victorious. The taxpayer then appealed to the New York Court of Appeals. While this appeal was pending, taxpayer and his wife entered into an agreement wherein he agreed to pay her \$34,000 less than originally stipulated under the terms of the first separation agreement.

During this period of litigation, the taxpayer had paid his attorneys \$12,000 in fees, which he deducted from his income tax as ordinary and necessary expenditures for the production of income. Was his assumption that by decreasing his liabilities he had increased his net taxable income and, therefore, produced income?

#### THE RULING

"We cannot agree," the U. S. Circuit Court of Appeals emphatically stated (Hunter vs. United States, decided February 3, 1955). The production of income means the creation of increased gross income and not the increase of

net taxable income resulting from the reduction of liabilities. Therefore, concluded the court, the attorney's fees are not deductible under the I. R. Code as "ordinary and necessary expenses-for the production of income."

#### THE QUESTION

Should a gift of cash, from a corporation to an employee, be reported as taxable income by the employee?

#### THE FACTS

votion to the welfare of the corporation

In appreciation for loyalty and de- board of directors of the corporation presented a gift of \$37,500 to two of "over and beyond the call of duty," the its principal employees. These gifts

THE AUTHOR: Benjamin Newman is an attorney (member of the New York Bar) who specializes in tax matters, estate planning, and real estate. He is associated with the law firm of Koenig and Bachner, in New York.

were to be paid in installments out of the surplus of the corporation. The corporation reserved the right to withhold payment if surplus funds were insufficient, but only until surplus funds were sufficient. The company did not deduct this amount as an expense for tax purposes, and the employees re-

ported the money received as a gift. The Commissioner of Internal Revenue contended that the amounts received by the employees constituted additional compensation and assessed a deficiency in income tax. The employees held the money had been presented as a gift and was tax-free. Who was right?

#### THE RULING

In affirming the decision of the Tax Court (Wallace et al vs. Commissioner of Internal Revenue), the U.S. Circuit Court of Appeals held that the money constituted taxable income to the recipients. The determination as to whether the money was a gift or additional salary depended on the intent of both parties involved—particularly the corporation who paid it. Failure of the employer to deduct the amount as business expenditure was significant, but not conclusive, of an intent to make a gift, said the Court.

Future payments (to be paid out of

surplus when available) implied that if it was an act of simple generosity, such generosity was modified at least partially by a consideration of the effect on the business. This contingent nature of the payment was more conclusive than the wording of the resolution or the evidence that the stockholders, directors, and general counsel spoke of making a gift and called it a gift.

The Court concluded that the terminology used by the parties was not deemed sufficient to substantiate the allegation of "intent to make a gift" in view of surrounding circumstances.

#### THE QUESTION

Are punitive damages reportable as gross income under the Internal Revenue Code?

#### THE FACTS

The taxpayer, a Pennsylvania corporation, had been engaged in protracted litigation with another company. Among the claims of Taxpayer were demands for punitive damages for injury to its business, resulting from the violation of the anti-trust laws. In December of 1947, the parties concluded a settlement of all pending litigation, and Taxpayer was paid approxi-

mately \$800,000. Taxpayer did not report \$324,529.94, represented as payment of punitive damages for fraud and anti-trust violations, for the tax year involved. He reasoned that this sum was not includable and taxable as gross income, as defined by the I. R. Code. The Commissioner ruled otherwise and assessed a deficiency claiming the sum taxable. Who was right?

### THE RULING

Whether punitive damages are includable in gross income, and, therefore, taxable has been a recurring question which has received many different interpretations by numerous courts. On March 28, 1955 (Commissioner of Internal Revenue vs. Glenshaw Glass Company), the Supreme Court of the United States settled this issue. The court said the catchall phrase in the definition of gross income, "... including gains or profits and income derived from any source," was inserted by Congress to exert in this field "the full measure of its taxing power." It has

been the interpretation of this court that Congress has applied no limitation as to the source of taxable receipts except as to those specifically exempted. Here we have an instance of undeniable accession to wealth, analyzed the court, clearly realized, and over which Taxpayer has had complete control. The fact that payment was extracted from a wrongdoer as punishment for unlawful conduct cannot detract from their character as taxable income to the recipients. It would be anomolous, concluded the court, to say that a recovery for actual damages is



#### ARNOT-JAMESTOWN DIVISION

AETNA STEEL PRODUCTS CORPORATION
JAMESTOWN, NEW YORK

(Circle 706 for more information)

# Let's Talla Forms



Common Language Machines now enable the business office to carry out a complete clerical process through a series of automatic machine operations. A peep at what the future holds for office routines is given in Moore's attractively printed brochure No. X. It describes an integrated Order-Billing-Shipping system which was designed by a large paper products manufacturer . . . and uses Moore business forms. It is one of the most efficient systems in operation, and is quietly making history with improved results and lowered costs.

# The System

The system is one of receiving orders at a central control at the home office and assigning them to the various mills for processing... with the prime objective being *speed* and *accuracy*. The original order is prepared manually by the salesman on a Moore 4-part Speediset Sales Order.

Preparing the Shipping Order: When the order is accepted, a master tape containing fixed customer information is removed from a file (or prepared, if the customer is a new one)



and fed into a Flexowriter. The typist manually types item specifications on the Shipping Order, and the Flexowriter automatically types the fixed information, while simultaneously preparing a punched tape containing all order information. The master tape of fixed customer information is returned to the file for use in preparing future orders.

Assigning the orders to the mills: Part 2 of the typed Shipping Order and the new punched tape are sent to a teletype operator who uses the tape to transmit the order to the proper mill.

The mill gets the order: Orders come over the teletype network, automatically printing on a Moore



4-part Shipping Form (Warehouse Release and 3 Bills of Lading). This gives the mill complete shipping instructions and a record control with no extra writing operations.

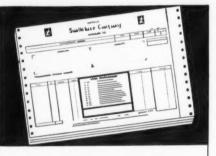
Preparing cards for inventory control: Back at the home office, the punched tape which had transmitted the mill order via teletype is used for a tape-to-card IBM punching operation and then discarded. Each daily batch of tabulating cards resulting from this tape-to-card punch operation is tabulated to obtain a summary of shipments released the day before. This summary is used for important internal controls.

Reporting and posting: The invoice cards and/or summary cards then serve various uses: (1) Tabulate a summary freight run; (2) Tabulate daily-weekly-monthly shipment and sales reports by mill, product, etc.; (3) Tabulate inventories monthly; (4) Prepare a Transfer posting master for Accounts Receivable.

# Savings and Gains

In Speed... shipping orders and bills of lading are on any mill's shipping platform within 3 hours after receipt of the salesman's order. Punched tape has eliminated delays and the need

(Circle 737 for more information)



#### INVOICING THE CUSTOMER

An 8-part Moore Fanfold interleaved form is stub-pasted for easy carbon extraction. Parts 1 —4 go to customer; 5 Auditing; 6 Division manager; 7 District manager; 8 Freight control.

for transcribing. In Accuracy . . . human error has been practically eliminated. In Automation . . . a wide variety of operations are all integrated and automatized from the first typing (itself two-thirds automatic from master tapes)—sales orders, shipping orders, wire transmission, tabulating cards, invoicing, accounts receivable, inventory, sales reports. In Economy . . . needless steps have been eliminated from operations, with savings in clerical expense.

If you would like a fuller picture of this example of Integrated Data Processing, with the forms illustrated, send the coupon below to the Moore office nearest you. It will bring a copy of the System Survey.

Moore Business F Niagara Falls, N		nc., Dept. M
Denton, Tex. Emeryville, Cal	if.	
Please send a	copy	of Systems
Survey No. X.		
Name		
Title		
Company		
Street		
City	Zone	State

taxable, but that the additional amount, extracted as punishment for the same conduct which caused the injury, is not.

#### THE QUESTION

Are "salary" payments made to the widow of a deceased partner includable in her income? Are the payments deductible expenses by the partnership?

#### THE FACTS

Black's Drive-It-Yourself Company was a partnership composed of members of the John W. Black Sr. family. The partnership agreement of the company provided that John W. Black Sr., as general manager, be paid a "salary" of \$20,000 per annum.

John W. Black Sr. was killed in an automobile accident on February 1, 1948. The surviving partners met on March 5, 1948 and agreed that the widow of the deceased partner, Ethel Black, continue to receive his salary for a period of one year. On December 15, 1949, the partners extended the payments of salary to her for the year 1949.

Ethel Black filed her income taxes for the years 1948 and 1949 but did not report such "salary" payments to her by the partnership. The partnership's tax returns for each of the years reflected these payments as deductible expenses of the partnership.

The Commissioner contended that these "salary" payments are includable income to Taxpayer Ethel Black as her distributive share of the partnership profits. Taxpayer's contention was that the "salary" is a non-taxable gift and a deductible expense to the partnership. Who is right?

## THE RULING

The Treasury regulations provide that when the salary of a deceased officer or employee is paid to the widow for a limited period after death in recognition of services rendered by the deceased, such payments may be deducted by the employer taxpayer.

However, the court declared that a partnership is not a taxpayer as such—and that all statutes and regulations point to the single conclusion that the

partnership was not authorized by regulations to charge the sums paid to Mrs. Black as expenses to its operations.

As to Mrs. Black, continued the Court, since she rendered no services whatsoever to the partnership, there was no consideration for "salary" payments. The mere fact that she was a partner did not require that gratuitous payments to her be considered distribution of income rather than as a gift. Donative intent is apparent from the course actually pursued, concluded the court. Therefore, payments were to be considered as non-taxable to Mrs. Black and non-deductible to the partnership. (Ethel M. Black, etc. v. William E. Davis, former Collector of Internal Revenue, decided February 28, 1955.)

### THE QUESTION

Can the Bureau direct a state agency to disclose confidential, financial information about a taxpayer, when such disclosure is prohibited by state and federal laws?

#### THE FACTS

The Director of a public welfare agency received a summons ordering him to give testimony and produce documents pertaining to the application of taxpayer's deceased mother for old-age aid, including the financial data furnished by taxpayer. The director maintained that he was prohibited by the Statutes which provide: "For the protection of applicants and recipients, the Commission . . and department . . is prohibited . . from disclosing the contents of any records, files, papers, and communication except for purposes directly connected with the administration of the programs of old age assistance . . ?"

### THE RULING

It cannot be denied, said the court (Tucker vs. Hilliard, U. S. District Court, decided March 4, 1955) that the records in question were not requisitioned "for purposes directly connected with the administration of old age assistance." Such protection survives the death of the applicant, said the court. Therefore, it concluded the summons in the case must be quashed. However, the Internal Revenue Service may subpoena such records if they are in the possession of a federal agency.



"We believe the growth of our company and the increased acceptance of our products over the past 50 years are due, in large measure, to our constant search for more efficient, economical ways of performing every operation. Thus we can continually produce better products to meet customers' expanding needs and applications.

"We use National accounting machines in our accounting work, not only to save valuable time and reduce operating costs, but also to help our operators do more and better work with less effort, and to obtain needed data on schedule.

"The versatility of these machines, which enables us to switch them from one job to another, and the simplicity of training operators, are also important to us."

WH Franklin Vice President

In your business, too, National machines will pay for themselves with the money they save, then continue savings as annual profit. Your nearby National man will gladly show how much you can save—and why your operators will be happier.



THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO
977 OFFICES IN 94 COUNTRIES

(Circle 740 for more information)

# FH means Forget Hand-folding ... and save!

A lot of people in a lot of offices would be glad to forget hand-folding if they could. It's a boring chore. Wastes many hours of valuable company time.

A Pitney-Bowes model FH office Folding Machine will make everybody happier...and end the waste! The FH is small, portable, takes up little space and costs less than a standard typewriter! Electrically driven, with semi-automatic feed, it will fold all your form letters, bulletins, statements, mail enclosures, etc....far faster and more accurately. (Automatic feed optional at slight extra cost). The FH can make two folds at once, double-

It makes eight different folds, handles sheets from 3x3 to 81/2x14 in a wide range of paper weights and finishes. And it takes only a few seconds to set it for a job. Just move two little knobs to adjust it for the kind of fold you want. Easy as tuning your TV!

For a demonstration in your own office, call the Pitney-Bowes office listed in your 'phone book-or send the coupon for free illustrated booklet.



The FH costs less than a typewriter!



Fully automatic model FM folds up to 19,000 sheets per hour

# PITNEY-BOWES Folding Machines

Made by Pitney-Bowes, Inc....originators of the postage meter ... 94 branch offices, with service in 259 cities in U.S. and Canada.

	PITNEY-BOWES, INC. 4502 Walnut St., Stamford, Conn.
Send fre	e booklet on Folding Machine to
Name_	
Firm_	
Addres	S

(Circle 747 for more information)



I would say that computers will make at least three major contributions to office automation. I believe that the order of eventual importance of these will be:

Computer contributions

1. Better information about business operations. Through new

kinds of reports and through the use of computing equipment, operating information can be processed in new ways to provide management with more useful reports than is now economical with manual

and punched card methods.

2. Faster reports, making possible time reductions on the order of 30 to 1. Financial as well as inventory and production reports can be prepared one day after the close of a corporation's books rather than thirty days as is now the case with many companies. Time savings of a similar order are possible in many other reporting areas.

3. Reduced clerical costs. In many cases, however, the cost savings are proving to be primarily attributable to replacements of many punched card machines by one computer rather than through reductions in clerical staff.

I would like to mention a case in which we have succeeded in reducing business costs by providing better information, for while I am confident that this area represents one of the greatest future uses of computers, I recognize that it is very difficult to convey the precise nature of such an application without citing an example.

We have been working with a manufacturer having several mills in different geographic locations. Order allocation - the determination of where any specific order will be manufactured had in the past been performed by one man in the central office and was based largely upon a table of freight rates, and some rules of thumb. Using an electronic computer that is rented for only a few minutes each day, we have worked out a program that takes into account many additional factors such as production schedules and cost structure in each plant. No clerical saving is realized in this application, but the dollar return for the small cost in originally working out the problem is enormous.

JOHN DIEBOLD, John Diebold & Associates, Inc.

. . . . . . . . . . . . . . . .

Hurrah for automation

One can reassure those who worry about technological unemployment by using the ideas of a French economist named J. B. Say. Over a century ago, Say drew up a simple little economic law that is taught to every student of elementary economics, namely that "The total demand for goods is the total of goods produced." That is, whatever is produced and offered for exchange in the market place is both demand and supply. Combine that economic law with page one of the economics textbook, i.e., "Man's material wants are insatiable," and you have the basic case for maximizing production. It quickly follows that technological advances that seem to displace labor do nothing of the sort. If less labor is needed per unit of output, then that merely frees some labor to produce still more of the same thing or of something else.

JAMES DAWSON, The National City Bank of Cleveland

Electronic supervisor controls

A new "electronic supervisor" that follows pre-set programs and automatically switches on or off up to 40 groups of remote operations—each on its own time schedule was demonstrated by the International Business Machines Corporation in February.

The new Central Control System will switch lights on or off, start and stop motors, open and close valves, control air conditioning, and perform scores of similar operations. Its most advanced application will be to start and stop production line machinery in automated plants.

The Central Control System will control operations automatically, maintaining the exact schedule established on its programs. But if it is necessary to depart from the pre-set program, manual operation is possible. A supervisor can break in on the control system at the central panel, for example, to turn on facilities for a special night shift; or he can break in at the remote relay, perhaps to turn on the lights or to stop the motors in a particular section of the plant.

# The machine-replaced worker

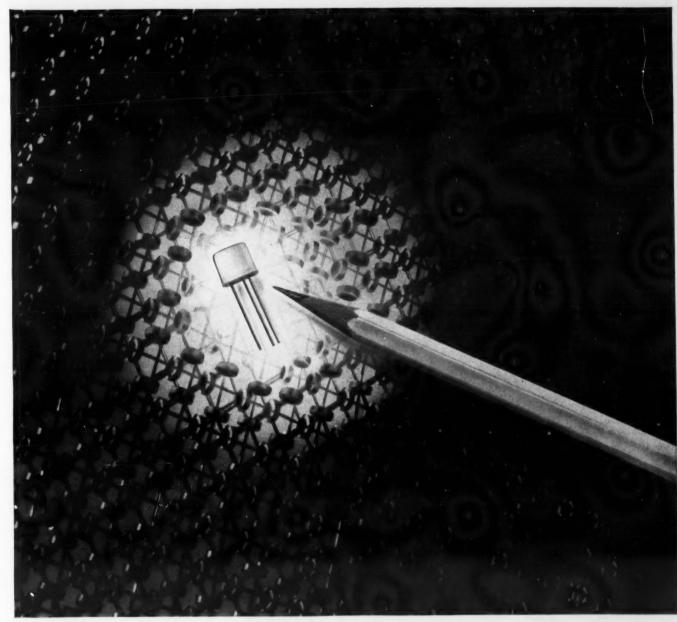
"When you talk about mechanizing any operation, that old bugaboo, technological unemployment, rears its head. I will be the first to concede that there is nothing bugabooish about technological unemployment to someone who is laid off when a new machine arrives. All he knows and cares about is one thing: He doesn't have a job. What will happen to the employees displaced by the machines? A good way to answer that is to see what happened to those displaced by machines 20 or 30 years ago. They not only found new jobs, but the very machines which displaced them are part and parcel of a steady trend which steadily increased their standard of living."

DON G. MITCHELL, Chairman of the Board, Sylvania Electric Products

"Brain" to replace 350 clerks

The Army is installing a mam-

Through IBM research, another FIRST for business



KEY TO
THE FIRST
ALL-TRANSISTOR
CALCULATOR
OFFERED
TO BUSINESS!

In the IBM 608, tiny transistors are combined with the fantastic "memory" capacity of magnetic cores to give business a data processing machine with significant new advantages. Made without a single vacuum tube, the IBM 608 Transistor Calculator uses these new solid state electronic components to meet the needs of business for faster computing and greater storage capacity with traditional IBM reliability.

The new IBM 608 reduces power requirements by 90%, saves valuable floor space, requires no forced air cooling, and can be operated from a standard 110-volt A.C. outlet. Exciting developments like the IBM 608 Transistor Calculator open the way to electronic data processing for more businesses than ever. International Business Machines Corp., 590 Madison Ave., New York 22, N.Y.



World's largest producer of data processing machines

(Circle 730 for more information)

Presenting . . . the

# PORTABLE, LOW-COST ADDRESSOGRAPH\*

... for departmental use in large business... for repetitive writing in every business



A machine to put on the job where the job is being done . . . in the office, factory, warehouse, or store

**I**ERE'S a brand new business tool that extends the traditional advantages of the Addressograph plate to every department of every business. Hundreds of profitable uses! It will save time and money wherever repetitive writing is done. For complete information call your nearby Addressograph branch office.

© 1955 A-M Corporation \*Addressograph is a registered trade-mark of the A-M Corporation

\* A new long-life Carbon Ribbon

- \* Speed...does an hour's manual work in minutes
- \* Fast-filing, low-cost card index plate
- \* Lightweight . . . weighs only 19 lbs.
- \* Compactness ... occupies less than 1 sq. ft.
- \* Automatic Plate Feed with automatic refile in original order

Write for descriptive folder. Address Dept. A-103 Addressograph-Multigraph Corporation 1200 Babbitt Rd., Cleveland 17, Ohio

Addressograph-Multigraph

SERVING SMALL BUSINESS-BIG BUSINESS-EVERY BUSINESS

(Circle 701 for more information)

moth electronic brain in Detroit to replace 350 clerks who keep an inventory of the replacement parts needed to keep all U.S. military vehicles rolling.

The brain costs \$5,000,000 but Brig. Gen. Paul M. Seleen, commander of the Detroit Tank-Automotive Center, estimates the device will pay for itself in six years. He said clerks take a month to do what the machine will do in minutes.

The brain will keep track of every fanbelt and wingnut the Army buys. When it sees stock falling on any of 450,000 items it will flash a warning to buy more. FROM THE ASSOCIATED PRESS.

Inter-plant computer hook-up General Electric recently inaugurated a four-way hook-up for the rapid

processing of engineering and research problems on two giant electronic "brains."

Linked in the communications system are G. E. plants at Evendale, Ohio (which is using a big IBM 701 on three shifts daily), at Lynn, Massachusetts, and at Schenectady, New York. Fourth point in the hook-up is IBM's Technical Computing Bureau at 590 Madison Avenue where G.E. will rent a second 701 for a full eight-hour shift daily.

The link between the computing centers in this system is provided by IBM's recently announced Electronic Data Transceiver, a device which duplicates sets of punched cards at remote points by means of telephone, telegraph, or radio circuits.

"This system provides an exciting foretaste of what can be expected in the field of data processing between remote points," according to Dr. H. R. J. Grosch, of G.E. "Although we are concerned principally in this setup with processing of design and engineering problems," said Dr. Grosch, "it takes little imagination to envision a similar network tying in many plants and branch offices for the central handling of standard accounting and record-keeping procedures."

# sales ideas Is distribution becoming too selective in smaller firms?

Gamble new product research against increased sales potential

by Arthur Basescue, President Bassons Industries Corporation

It is a rare company which fails to recognize, and discourage, the marginal customer, the small order, and the low-volume product. This is due to the radical increase in the cost of doing business during the last decade. Most sizeable manufacturers have classified their customers and prospects into A, B, and C groups, and

have pretty well mapped out their salesmen's days to exclude undue attention to any but the most sure-fire, profitable business.

This slide-rule approach is undoubtedly necessary, but perhaps it is going too far. We seem to be losing the personal element—call it gamble, hunch, or judgment — which sometimes dictates that we cultivate a seemingly unprofitable product or customer for its unde-

fined potential. The smaller manufacturer is particularly plagued by the dilemma: should we stick to "safe" business and stand still, or should we try our wings even when we cannot afford the last word in high-priced development and research?

It seems to me that the true forte of the small and medium-sized company

is personal daring, relatively unhampered by such big-company millstones as committees, internal hierarchies, red tape, tradition, etc. At Bassons, we have developed important new business —and broadened our horizons considerably — by repeatedly sticking our necks out.

For example, during the early days

of World War II, when reinforced plastics was in its infancy, we learned that the Army was seeking jet engine containers which could withstand burial underground for five years. No material was specified. Our engineers thought we could qualify with a fiberglass-reinforced plastic container. The military was politely interested, but they were not investing in our research, nor would they foot the

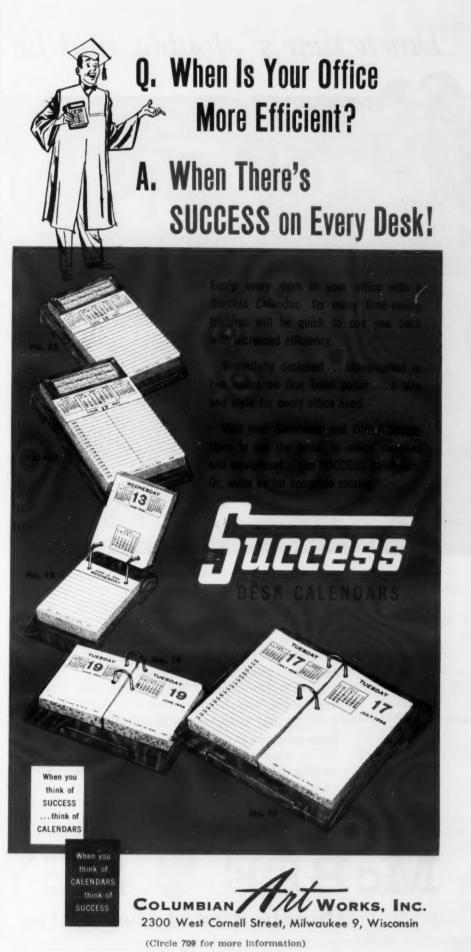
bill retroactively if we did succeed in making such a case. Starting virtually from scratch, we tested and failed, and tested and improved, and finally came up with a superior container that got the order for us.

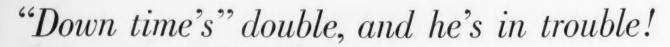
A success story? No. We never did recoup our research costs on that item. The return came later. Having learned

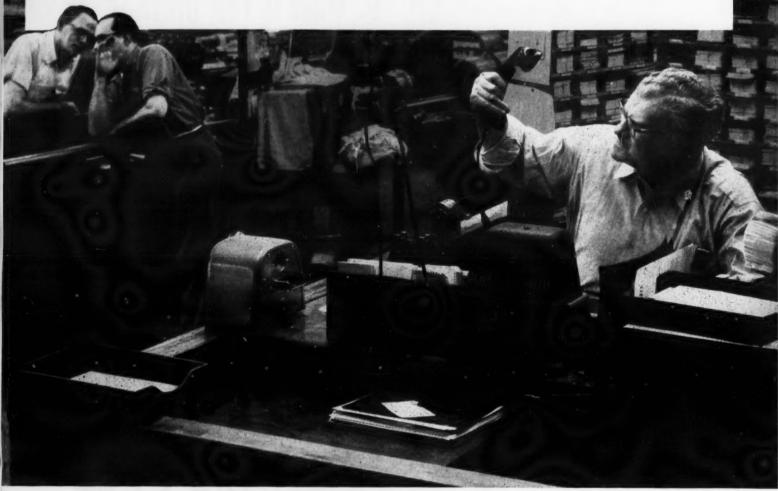


10. To cultivate an up-

and-coming customer.







Alas, poor foreman! The plant manager is really blowing up. And so soon, too! . . .

For the idle man-hours he's beefing about were chalked up only yesterday. Yet the whole story was on his desk today . . . thanks to the speed of Keysort punched-card accounting.

Time was when below-standard performance went undetected for weeks, while overhead leaped upward like a gazelle. Slowly-processed figures were to blame. But now Keysort gives the plant manager a detailed summary of the previous day's labor costs by 2 P.M. each after-

noon. Knowing the facts, he can move to correct wasteful in-plant situations *on time* — before they turn into profit drops.

A McBee Keysort installation can give you comprehensive, accurate reports on every phase of factory operation, and give them to you *fast*. In your hands, complete, by the 4th of each month. Important interim figures weekly, even daily. Whether yours is a 100-man branch plant or a payroll of many thousands. At surprisingly low cost.

The trained McBee man near you can show you how it's done. Or write us.

McBEE



# Punched-card accounting for any business

Manufactured exclusively by The McBee Company, Athens, Ohio • Division of Royal McBee Corporation

Offices in principal cities • In Canada: The McBee Company, Ltd., 179 Bartley Drive, Toronto 16, Ontario
(Circle 734 for more information)

how to make reinforced plastic into such huge shapes, we applied the knowledge to a host of other products never before attempted in plastics.

Another wartime flyer which paid off later was a plastic carrying case. We looked at the then-existing wood and metal containers for the delicate and intricately shaped contents of a chemical warfare kit containing test tubes, bottles, etc., and decided to try our hand at something entirely different.

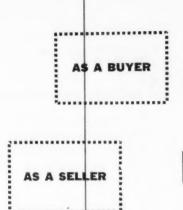
Many months and dollars later, we came up with a smaller, lighter — and safer—case. We produced multi-cavity parts never before achieved from a single sheet of plastic. The experimental cost was on us. But from it grew one of our most stable, staple items: tailor-made carrying cases for everything from a tote box for guns to a salesman's sample case.

Sometime ago, we decided to broaden our base by entering the consumer market with a line of serving pieces and giftware made of clear plastic, with Philippine raffia floated inside. The line is not sweeping the country—yet. However, the process we developed got us the job of making lap trays for commercial airplanes. It also led to the development of a new, reinforced plastic, department-store display table.

Research is not the only factor in a plunge. Sometimes the decision involves going along with a customer who, on the face of it, seems to hold little promise. A moderate-sized company which does not want to overextend itself sometimes has to choose the business it can accept. It always can decide which business to pursue.

At a time when we were operating at almost full capacity, we were invited by the maker of an electronic flash unit to design a lightweight, compact case. Less demanding assignments were in the offering—ones in which we would simply be handed the blueprints—but we felt we would be contributing directly to the methods product's success. The item is making money and we haven't regretted our decision.

Many hunch plays did not quite come off. But the failures give us the experience on which to build the successes. There is no set of rules for when, how, and where to throw away the rule book. We'd be right back to the scientific approach if there were. m/m



# How much is your business worth?

When it comes to fixing a price when selling a business-or establish-

ing the value of closed corporation stock—here are the formulas used

Unless the stock of your company is traded regularly, it could be extremely difficult to determine its value. If your firm is unincorporated, your problem is further complicated. The seller seeks a high price and the buyer seeks a low price. Prolonged negotiation usually results.

This is particularly true when business owners want to enter into a buyand-sell agreement contingent upon the death of one of the parties. Since these agreements are usually funded by life insurance, life underwriters are frequently called upon for advice during such negotiations. Our job is to assist the parties in their efforts to set a fair and realistic transfer price, without impinging on the job of the attorney or the accountant.

#### What's a good price?

Let's assume that the several owners of a business have each agreed to sell his interest to the others when he dies. The negotiators are in a strange position since each must picture himself as both a buyer and seller. Not the least of his considerations, too, is the fact that the final price agreed upon will probably establish a value for estate tax purposes. (It is worth remembering that the government generally accepts a value arrived "at arm's length, when it is a bona fide transaction between parties seeking a fair market price." This is an extremely valuable by-product of a buy-and-sell agreement.)

In these situations, there are a num-

ber of formulas which may be applied. Since businesses vary widely, we do not recommend them as anything more than "yardsticks." As such, however, they are very valuable.

### A case in point

As an example, let's look at the skeleton balance sheet for the A & B Company, shown in Figure 1. If A & B were to accept Book Value as the worth of the business, they would have a value of \$60,000.00 — capital accounts plus earnings. But, if they did use that as the transfer price of their business interests, they might be short-changing themselves and their families.

How come? Think of the earning power of the business and the business owners. Assume normal earning power of this type is 15% of invested capital. Capital, we know from the balance sheet, is \$50,000.00. So here, normal earnings would be \$7,500.00 (\$50,-000.00 x .15). Again, referring to the balance sheet, we learn that the actual earnings were \$10,000.00—which is \$2,-500.00 above the norm. So now we capitalize \$2,500.00 at 15% - that means divide by .15 or multiply by 62/3. We come up with the fact that the earning power of this business is worth \$16,666.00.

So this business is really worth:

Not \$50,000.00—the Capital Value

Not \$60,000.00—the Book Value

But \$76,000.00 — Book Value plus

earnings due to goodwill

In this case, we used a partnership

statement. If it was a corporate balance sheet, "capital accounts" would be shown as "outstanding stock," and "earnings" would be shown as "profits."

In the case we used, the owners were the same as "goodwill." Sometimes the parties will agree upon a stated figure for the value of the goodwill (instead of using a formula for arriving at its value). This is all right as long as the parties use a realistic figure and they keep it up-to-date. But goodwill is not always measurable. Nor is goodwill always a valuation factor. Take the case of many small businesses where earning capacity is often closely tied to the talents and efforts of key men. These talents cease with the death of the individual and result in no economic benefit to the surviving members of the firm. The courts have held that goodwill is a valuable factor only if it belongs to the business. In effect, goodwill must be able to *survive* a transfer of the business. High earnings, in and of themselves, do not indicate goodwill.

#### Three formulas for valuation

The three formulas given below are ones used by the government in estate tax situations affecting closed corporations' stock where the owners have not set a buy-and-sell agreement. In most cases, a company's accountants are best equipped to determine which would be most useful for the parties in the business that is involved.

# STRAIGHT CAPITALIZATION

This method is set to allow for evaluating goodwill as well as tangibles. Assume that a manufacturing company earns \$40,000.00. These earnings are capitalized on an 8% basis;

Figure 1.

A 8	B COMPANY -	- BALANCE SHEET		
	December	31, 1954		
Assets		Liabili	ies	
Cash Accts, Receivable Inventory	\$	Notes Payable Accts. Payable Accrued Expenses		\$
Total Current Assets Plant and Equipment	\$65,000 \$30,000	Total Current Liabilit Mtge. on Plant & Equip.		\$25,000 \$10,000 \$35,000
		A's capital Acct. B's capital acct. Earnings Available	\$25,000 \$25,000	
		to A & B Partnership Net Worth (Book Value)	\$10,000	\$60,000
Total Assets	\$95,000	Total Liabilities		\$95,000



thus, \$40,000.00 x .08 is equal to a \$500,000.00 value.

# 2 INCOME TAX METHOD

In this case, we allow a fair return of 8% of average tangible assets on the \$40,000.00 average earnings. Let's say the average value of tangible assets is \$300,000.00. We then determine the earnings in excess of 8% of average tangible assets, and capitalize them on a five-year purchase basis to arrive at values of "goodwill" or intangibles. This figure is then added to tangible assets to get an over-all basis. Here's how the computations look: Average value of tangible assets \$300,000 Average earnings \$40,000

8% of average tan-

gible assets 24,000

> \$16,000 Excess

Value of goodwill (5 x \$16,000)

80,000

Total value

\$380,000

#### THE YEARS PURCHASE **METHOD**

In this case, we assume a fair return of 6% on the Book Value of the company. We deduct this fair return from the average earnings. We then multiply the excess earnings by five years to compute the value of goodwill. This figure is added to the Book Value to arrive at total value of the company. The computations look like this:

Book value

\$300,000

Average Earnings 6% of Book value \$40,000 18,000

\$22,000

Excess earnings over 6% of B.V. \$22,000 × 5 years purchase equals value of goodwill

110,000

Total value

\$410,000

These are measuring rods—a businessman and his advisors are the best judges of the worth of a business and the standards that must be applied to determine that worth. The proper tools are important in fixing a price fair to all concerned. m/m

# How to sell

# AN INVENTIONS PLAN to your employees

The right and the wrong way to handle an effective program

What happens when an employee, working on company time, using company tools, facilities, and know-how gained through his company experience, comes up with an idea for a new product or even an invention? The courts have held that an employer has no rights to inventions made by employees, merely because of employment. It is with this court ruling in mind that most corporations have taken positive steps to protect their "equity" in the creative activities of their employees. This is done by means of a "Patents Plan"—an agreement between the company and the employee-inventor, which details the rewards and the rights of both parties.

Patents Plans vary widely. Some seem extremely liberal—others imply exploitation of the employees beyond all ethical standards of normal industrial relations. Most often, however, these plans do not vary as widely as a first glance would indicate. What does vary, in alarming disproportion, is the manner in which the company makes the presentation of its "patents plan" to employees.

# A case history

One of America's largest corporations broke almost every rule in the book in trying to put an Inventions Plan into effect. In this case, ironically, the Patents Plan was far more liberal than most. It provided for a 15% continuing royalty to the employee, plus

the payment of a \$100 bonus. Under such an arrangement, an employee could realize a rich financial reward for his patent.

The corporation is no infant in the world of business and finance. It has a tremendous backlog in defense business; it has more than 50,000 employees; it has plants strategically located throughout this country and Canada. It has engaged in the production of a wide variety of military items, many of them top secret. It has aggressive, youthful management. Its stock has tripled in value within the past year. In retrospect, it seems almost inconceivable that this company, brilliant in the conduct and development of its business, could have proven so inept in dealing with its own employees.

Two years ago, the directors of the corporation approved an "Inventions Plan" for the employees. For some unexplained reason, nothing was done to circulate the plan or to put it into effect. It remained with the legal department. Then, after 17 months, a bombshell exploded unexpectedly in the corporate lap.

Two supervisory employees at one of the most important subsidiaries of the corporation invented something that threatened to revolutionize development in a certain industry. Of infinitely greater importance, the invention appeared to have real possibilities in the atomic field. The directors, executives, and legal staff were caught short.

The problem was how to extricate themselves. Here the corporation got its first and only break.

The principal inventor had been an employee for thirty years. When the General Manager, augmented by some legal assistance from the home office of the corporation, talked with him, he agreed to sign the Inventions Agreement. His co-inventor did likewise. The "fire" was thus temporarily put out. The corporation, not wanting to be caught napping again, told the legal department to whip the Inventions Plan into final form. Almost overnight it was reproduced in a booklet. Now the real trouble began. A copy was mailed to each employee at his home, with this letter:

Dear Fellow Employee:

The Board of Directors has approved an Inventions Plan for Employees. The enclosed booklet describes for your information the purpose and scope of the Plan.

In order to participate in the Plan, it is necessary that all employees sign an Inventions Agreement, a copy of which is also enclosed for your study.

Your department head will notify you as to the time and location of the formal signing of the Inventions Agreement. Your cooperation will be most helpful.

> Sincerely, General Manager



The kindest thing that can be said about this letter is that it is more notable for what it does not say than for what it does. It makes no effort to explain an "Inventions Plan." It went to several thousand employees, many of them with little or no education. At least 95% of them had never heard of an "Inventions Plan."

It would have helped if the General Manager had written: "If there is anything in this booklet which you do not understand, please come in to talk to me about it." It would have helped further if he had explained that "this plan is similar in all respects to the inventions plan used by other leaders in our own industry."

The most damaging thing about the letter is that it left the rank and file employee utterly confused. It says, "In order to participate in the Plan, it is necessary that all employees sign an Inventions Agreement. . . ." This makes it appear that the Plan will not go into effect unless all employees sign the Plan. This confusion is compounded by the final paragraph telling the employee that his department head will notify him as to the time and location of the formal signing of the Inventions Agreement. This leaves the impression that the signing is a "mass signing," more or less compulsory, and that the employee has no choice but to sign at the appointed time and place.

The booklet aroused suspicion from its opening sentence: "To encourage

and stimulate inventiveness by employees, the Board of Directors of the Corporation has adopted this Plan." The employees did not feel that this was the basic purpose of the Plan. They also did not like another sentence on this same page: "This Plan shall be administered by an Inventions Committee, the members of which shall be appointed from time to time by the Board of Directors." The workers felt that if all this was being done for them, they should at least have a place or two on the Committee.

The booklet contained 12 pages, consisting of 14 sections. The last 3 paragraphs of the booklet are quoted herewith, in part, to show how the corporation failed to understand the human relations problem involved in trying to put across this Plan:

a) The Corporation shall have the sole discretion in determining the matter of the sale, licensing, use, assignment or other disposition of any invention, and whether the same will be with or without compensation therefor; the Corporation with its sole discretion may grant royalty-free licenses or may waive future royalties or other payments of any licenses or sales . . .

b) The Corporation reserves the right at any time to modify, revoke, or terminate this Plan by executive order.

c) The Corporation, in its sole discretion, reserves the right to reward employees who are not otherwise entitled to remuneration under this Plan.

The booklet left the employees with the firm impression that the Plan was strictly for the Corporation, with the employees left to tag along with little more than the leavings.

The reaction of employees to the Plan was immediate. They were indignant. They felt that their intelligence had been insulted by being asked to be a party to what appeared to be a one-sided deal. Confused by the terminology in the booklet, they stormed their union's local offices for information. The union took one look at the letter, the booklet, and the Inventions Agreement, and said, "Sign nothing!"

The Local then requested a meeting with management for clarification. Management at the decentralized subsidiary was unprepared to answer any questions about the Inventions Plan.



To suit your needs. You can photograph the fronts and backs of documents simultaneously side by side on 16mm film; or photograph the fronts down one side, then up the other . . . or across the full width of the film. A specially designed spacing control prevents film waste . . . gives you maximum number of images per foot with automatic or hand feeding. Glass document guides assure sharper pictures.

Eliminates a separate job of endorsing checks before deposit in your bank. The Reliant does it automatically in the fast, smooth microfilming run. The time saved quickly pays for the high-precision endorser unit, optional at slight extra cost. This accessory conforms with the Reliant's trim, all-metal design...becomes an integral part of the microfilmer when attached.

(Circle 719 for more information)

the

sta

# ... the Recordak Reliant

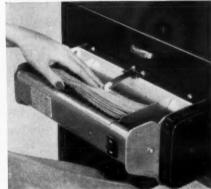
... a sensational high-speed, low-cost microfilmer by the originator of modern microfilming. Check its plus features designed for even greater efficiency and economy in business record keeping



Just like having 3 microfilmers instead of 1. You'll be able to photograph your records at any one of three reductions . . . 40 to 1, highest in 16mm automatic microfilmers; 32 to 1; and 24 to 1. Thus, you can always get the right picture size for the job at hand. Takes only a minute to switch lens kits for desired reduction. (One lens kit is included in Reliant . . . other two are low-cost accessories.)



reaching by your operator-she sees the documents pouring out . . . neatly stacked in sequence. Receiving tray can be adjusted immediately for varying sizes. All controls are at her finger tips ... item counter and film-footage indicator can be checked at a glance. All of these features—plus many, many more



Stops double feeding. The Reliant's revolutionary high-speed automatic feeder sets new standards for accuracy ... all but ends possibility of missed pictures. If two documents are stuck together, they're halted in feeder. More than 400 3x5-in. file cards . . . up to 140 letters can be photographed per minute. Slightly oversized documents (over 11 in. wide) can be photographed without a wrinkle or tear.



Here's extra protection. Two rolls of film can be exposed simultaneously at all three reduction ratios; and with all three microfilming methods. This is an important advantage when extra films are needed for off-the-premises or vault storage. Or when home office as well as branch office must have copies. Something else-the Reliant accommodates 200-ft. rolls of film, which cuts your film-loading operations in half.

"Recordak"

is a trade-mark



Eye-level stacking. No stooping or -in the surprisingly low-cost Reliant.

# ----MAIL COUPON FOR FREE BOOKLET----

"Short Cuts that Save Millions" shows how you can cut costs with the new Recordak Reliant. Typical case histories show how Recordak Microfilming saves for over 100 different types of business, thousands of concerns. You're bound to profit by reading it.



originator of modern microfilming-and its application to business systems

RECORDAK CORPORATION (Subsidiary of Eastman Kodak Company) 444 Madison Ave., New York 22, N. Y.

Name	Position
Company	
Street	
City	State

(Circle 719 for more information)

Wires buzzed between the subsidiary and the Corporation's home offices. It was decided, in an effort to calm the situation, to indefinitely postpone enactment of the Plan.

# The right way—what others do

Properly handled, an Inventions Plan offers an opportunity to a company to bring itself closer to its employees. The Plan can be sold as a distinct benefit to the employee, with the company ready to take the risk. meet the expense, and pay off too.

It should be remembered first that very few inventions are of the monumental type described above. Most plans are designed to accommodate the more typical product or method improvement. In the case of the truly "big" development, the company is generally prepared to negotiate an arrangement. The plan is only its protection against an employee taking a process developed principally on company time, and attempting to deal directly with a competitor. In effect, the company avoids being forced to compete on the open market for its own new developments.

It is axiomatic, in this era of enlightened labor relations and highly cerebrated industrial techniques, that no firm can exist without employees able and willing to infuse new ideas into the competitive stream.

A good example of a successful Inventions Plan is the one prepared by the General Electric Company. G.E. tells its employees flatly, "The future success of the Company depends upon maintaining a strong engineering position." G.E. requires all managerial and technical employees to sign an "Employees Patent and Confidential Information Agreement." Inventors are paid a "patent bonus" of \$100, paid partly in General Electric common stock and partly in cash. That is the end of company payment.

G.E. has no royalty arrangements with its employee inventors. The company gives this reason:

"This award is a purely nominal token of appreciation for an accomplishment which, in general, cannot be accurately evaluated. The inventor's real award, as well as that of his co-workers, will be in terms of progress in the General Electric



# POTENTIAL UNLIMITED

a giant step in automation for business

Announcing the Remington Rand UNIVAC FILE-COMPUTER ... a medium-size data-processing system

The speed of electrons...the memory of magnetism ... and over fifty years' experience in business records and control . . . all these have been built into the Univac File-Computer.

Here's building-block flexibility that adapts to practically any situation—an electronic brain with common-language input-output for application

after application. Here's machine versatility that can file, find, compute and summarize simultaneously - a medium-size system that can, for example, handle billing, inventory and sales analysis as

Here's the truly automatic office your top management should know about. For this newest Univac can bring you lower costs, increased production, better customer service and freedom from supervisory routines. Remington Rand will gladly call to show you how and where.

a single operation.

ROOM 1625, 315 FOURTH AVE., N. Y. 10 Remington Rand Punched-CARD ELECTRONICS

(Circle 749 for more information)

organization. This policy of General Electric is one which experience has shown to be fair and reasonable. To the engineer or scientist, the company offers scope for the ability and talents which he has. The equipment he needs is made available to him, and he has experience and counsel to guide him and the opportunities to follow his interests in a wide range of fields. In recognizing his efforts, inventiveness is considered, but is not given disproportionate weight. His progress will be determined by his over-all value as measured by his contributions through teamwork to the progress of General Electric."

In industries more dependent on radical design and technique changes, an Inventions Plan usually provides an inventor with more liberal benefits. A good example of this is the aircraft industry, where basic plane and engine designs undergo such drastic changes, that obsolescence may be tagged to an invention before it can ever be put into production.

In this industry, the inventor usually receives a royalty. The royalty may be 30% of the first \$10,000 received from use of the invention, 20% of the next \$10,000, 10% of the next \$50,000, and 5% above \$70,000. Or, the employee may receive a flat 10% royalty, after deduction of all costs, fees, and expenses incurred by the company.

In almost all royalty arrangements, however, the corporation pays no royalty for its own use of the invention. This is known as a "shop right" to the invention. Whatever the arrangement, there is much to be said for Patents Plans. They are mutually beneficial, although it can scarcely be denied that the corporation will usually be the principal beneficiary. m/m

THE 2ND ANNUAL

### **BEST PLACE TO WORK** AWARDS

FOR OUTSTANDING EXAMPLES OF OFFICE LAYOUT AND PLANNING

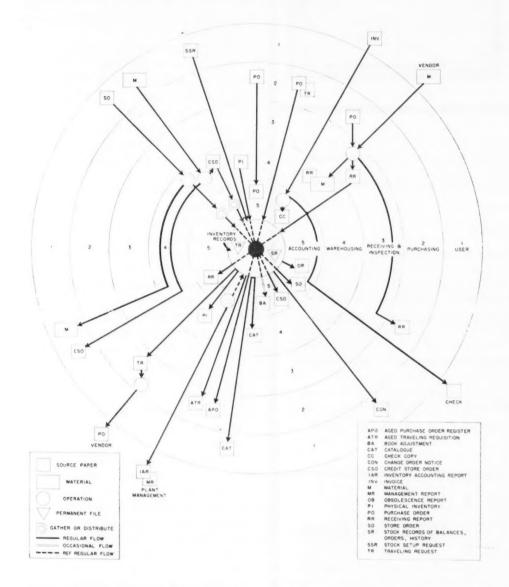
FOR ENTRY BLANK AND RULES

See page 20 for complete details or circle number 800 on the Reader Service Card

CONTEST CLOSES JUNE 21

methods

# How peripheral charting simplifies the development of a clerical system



In the development and installation of a clerical system, a model or plan is a vital first step. The systems model takes the form of a chart which is used to determine the work-

THE AUTHORS: K. R. Wright and C. D. Poland, Hanford Atomic Products Operation, Richland, Washington. J. S. Marshall, E. W. Slusher, and H. Teller assisted in the development of both the article and the chart.

ing groups or departments involved, responsibilities assigned each group, and the amount of information required for each group to execute its assigned responsibilities most efficiently and economically.

Conventional methods of charting, however, do not lend themselves to the planning of complicated, multiple function administrative systems. Therefore, a peripheral method of setting up a systems model has been developed and used very successfully in connection with systems studies. With a minimum of explanation they are readily understood and provide for the display of an unlimited number of functions and documents.

The peripheral method of setting up a systems model should start out with four basic questions:

1. What groups or departments are involved in the system and what are their responsibilities?

2. What information is required by each group or department to execute its assigned responsibilities most efficiently and economically?

3. What groups or departments will be required to furnish the necessary information?

4. What basic data will be needed to compile required information?

In developing a peripheral systems model, the center of the chart circle represents the central data processing group for the system being developed or studied. Around this center circle, areas are designated to represent each additional group or department involved in the over-all system. The identity of the group, department, or function is written in each area.

The order in which participating groups are arranged is of no particular importance. Additional groups may be added, and others deleted, during the course of development. This feature of charting has unlimited possibilities, particularly when it is desirable to indicate functional groups which have been eliminated.

After the initial groups or departments have been added to the circle, an imaginary line is drawn horizontally through the center. The top half of the model is used for "input," the bottom half for "output." Input may be defined as the various pieces of basic data coming into the central data processing group. Output consists of reports needed to properly perform assigned functions and responsibilities.

As indicated in the sample chart, responsibilities assigned to the Financial Department point out the need for information pertaining to purchases and receipt of inventory materials, withdrawals by the various using depart-



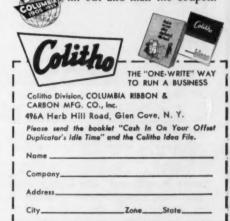
# Go Ahead, Mister-It's Your Dough!

If you're satisfied to literally throw money out the window . . . keep right on with those antiquated paperwork methods.

What do we mean? Just this! If your paperwork procedure is a conglomeration of different forms—a succession of typing and retyping operations, then you're paying for a lot of needless work that is eating into your profit margin. Even clerical help is too costly to squander on repetition of effort. Here is where Colitho Offset Duplicating Products come in.

For years now, Colitho paperwork engineers have been showing business people how the duplicating machines they already have can be used to increase the efficiency of business forms procedure—not just in bulletins, sales sheets and reports, but in the purchasing, manufacturing, engineering and accounting systems of a business.

An idea of what this kind of help might mean to you is contained in the 16-page booklet, "Cash In On Your Offset Duplicator's Idle Time." We'd like to send you a copy. Just fill out and mail the coupon.



(Circle 763 for more information)

# 2ND ANNUAL

# "Best place to work" awards



# FOR OUTSTANDING EXAMPLES OF OFFICE LAYOUT AND PLANNING

# TWO MAJOR AWARDS-\$250 EACH

Best integrated general offices—small firm—occupied by a firm with fewer than 100 office employees.

Best integrated general offices—large firm—occupied by a firm with more than 100 office employees.

### 7 SPECIAL AWARDS

Best general offices in a suburban location—offices for a firm of any size.

Best executive office or suite—for one man or for a group of executives whose offices are adjacent to one another. Any size firm.

Best clerical work center—a single department or the entire clerical operation in a firm of any size.

Best employee lunch/lounge area—in a firm of any size. Entry may be of separate lunchroom, lounge, cafeteria, coffee bar, or a combination of any of these areas.

Best board or conference room—in a firm of any size. Area may be for large groups or small conferences, or a combination of the two.

Best reception room—in a firm of any size. Area may be for multiple use or reception only.

Best "special situation" solution—in a firm of any size, which shows a practical solution to an unusual problem in design or layout.

What makes your firm a "Best place to work"?

These awards aren't concerned with merely "beautiful" offices. But they are designed to demonstrate how well-planned, properly integrated offices improve employee productivity and morale.

If your company has done an outstanding job in any of the categories listed above, here's a chance to win recognition and—at the same time—gain favorable employee, public and stockholder publicity. Winning entries will be published in MANAGEMENT METHODS or THE INTEGRATED OFFICE.

It's easy to enter

Elaborate entries or costly photographs are not necessary. Just have the pertinent person in your firm—or your architect or designer—fill in the official entry blank

and clip to it a few photographs, snapshots or sketches. That's all! Contest closes June 21. All entries must be on the official MANAGEMENT METHODS entry blank. You can get an entry blank by circling number 800 on the Reader Service Card bound in this issue.

Who can enter

Entries may be submitted by a company, an architect, or an office designer. The major cash awards and wall plaques will go to the winning architects or designers. Plaques will also be presented to the award-winning companies. For the Special Awards, plaques will be sent to both the company and the architect or designer. More than one entry can be submitted. In addition, all entries will be automatically reviewed by the judges for possible consideration in categories other than the one specifically selected by the entrant.

# FOR ENTRY BLANK

and rules please circle No. 800 on postage-paid Reader Service Card bound in this issue.

CONTEST EDITOR

Management Magazines, Inc. 141 East 44th Street, New York 17, New York

**ENTRIES CLOSE JUNE 21, 1955** 

ments, and inventory status within the warehouse. From this information, dollar inventory records and reports, as well as management control reports, are developed.

Some documents come into the accounting function, go through data processing, and back to accounting, while still others come directly to accounting from the originating group without going through data processing. Additional information, which is not a direct result of any one document, is obtained from data processing.

To follow a complete cycle of activity through the chart from beginning to end, start at the eight o'clock position on the sample chart. A traveling requisition is shown coming from data processing into Purchasing. Purchasing prepares a purchase order which goes to the vendor.

At the twelve-thirty position, the requisition is returned to data processing with a copy of the purchase order. At the one-thirty position, the material is shown coming into receiving, where it is checked against a copy of the purchase order and a receiving report is written and distributed. The material and one copy of the receiving report go into warehousing. This arrangement demonstrates that a document coming out of the system into a given department at one location on the chart can be conveniently put back into the system from another chart location. It also shows that certain transactions need not be handled directly through central data processing.

After the flow of information has been established on the chart in the manner outlined, the type of data processing system necessary to compile, compute, and distribute data is considered. A determination can be made to indicate whether a manual or mechanical system will be most effective for this function.

This method of charting is designed to show the over-all "input-output" of the organizational components involved in a given system and the flow of information between each group. It is not intended to show detailed activities within each group. This type of systems model is particularly valuable in establishing a generalized picture of an overall system. m/m

# How to insure profits, double employee income

# Incentive management is the key to higher productivity

The average worker with the Lincoln Electric Company of Cleveland, Ohio, made \$8,000 in 1954. This wage is about double the average for our type of manufacturing industry. We are manufacturers of arc welding equipment. This high pay scale is only possible because our productivity in terms of dollar sales per man per year is about three to four times average for our industry. This figure was approximately \$37,000 in 1953. The company has been a good investment for its owners. It has never missed a dividend since it started paying them, and for the past ten years that dividend has been 6% on the company value.

These results are somewhat above the norm for the metal working industry. To explain how they are achieved, we can find nothing in our organizational setup, plant equipment, product, or mechanics to which can be assigned the responsibility. It must be what we call *incentive management*.

This term refers to the underlying philosophy with which the business is conducted. The term does not refer to specific work incentives or any system of incentives. If it were only a technique of paying more for more production, it would not be worth discussing.

#### Five basic underlying ideas

Incentive management is the business philosophy that motivates human relations as well as business relations in our company. The ideas of incentive management have permeated into the thinking of people at all levels of the organization. There has been no formal or self-conscious indoctrination to the ideas, but rather the truth of the ideas has been demonstrated in action over and over again. The results have

been convincing to all involved that here is something that is right and good. Consequently, these ideas motivate daily actions and decisions.

From experience, I have come to look on five basic ideas as the foundation upon which this philosophy is built. Without a sincere conviction of the truth of these basic ideas, success to any large degree is impossible.

First of all, we must have a sincere belief in people. We must believe that people have abilities to do jobs much bigger and greater than they are now doing; that they are not merely button-pushers with no latent ability. Many people in management today, although paying lip service to this idea, nevertheless believe that the working man is a pretty dull character with little or no potential. Incentive management cannot succeed in this atmosphere.

The second basic idea is closely related to the first, but is important enough to be mentioned separately. We hear a great deal about the dignity of labor, but how many people really believe that hard work is healthy? Only hard work will make incentive management succeed. It is not a substitute for hard, intelligent work. It is not an efficiency system. Incentive management ideas can only flourish where there truly is no distinction between management and labor. All labor must manage and all management must labor.

Stated negatively, the third basic idea is that profit is not the primary objective for which a company is organized. Profit is good and necessary, and a lot of it will be made under incentive management, but it must be a by-product rather than the primary object. The primary objective of any business, above all else, must be one

# HOW XEROGRAPHY SPEEDS PAPERWORK cuts duplicating costs \$11,000 a year for THE EQUITABLE

Life Assurance Society of the United States . . .



Equitable's Home Office in New York City

Equitable has found an important use for xerography in the production of a 70-page monthly directory. Using Flexoprint lists which are easily kept up-to-date, paper masters are made of each page by xerography and multiple copies run off on an offset duplicator. This accurate, speedy and economical method saves Equitable \$1,000 a year.

Also, Equitable uses versatile xerography to prepare paper masters for duplicating forms, sales manuals, progress, financial and sales reports, technical bulletins, reprints of magazine articles, and reference manuals.

Anything written, typed, drawn or printed can be reproduced with photographic accuracy in about three

**WRITE** for proof of performance folders showing how Equitable and companies of all kinds are cutting duplicating costs and speeding paperwork with xerography.

The Equitable Life Assurance Society of the United States, third largest insurance company in the world, was founded in 1859. Today, Equitable Life has 110 offices in 48 states and maintains a field force of 8,000 life underwriters serving more than five and one-half million members.

minutes by xerography onto an offset paper master for runoff of multiple copies on an offset duplicator. Original copy may be enlarged, reduced or reproduced same size by xerography in XeroX® copying equipment. Copies can be made from one or both sides of original material by xerography.

For use in diazo type machines, translucent intermediates can be made from any original subject in the same speedy way.

There is no limit to the versatility of the dry electrostatic xerography process in paperwork duplicating applications. It is now possible with xerography, to produce up to eight copies, including an offset paper master or translucent master, from one xerographic image.



# THE HALOID COMPANY 55-6X HALOID STREET, ROCHESTER 3, NEW YORK

BRANCH OFFICES IN PRINCIPAL U.S. CITIES AND TORONTO



# XEROGRAPHY

(ZE-ROG-RA-FEE)

The fastest, cheapest, most versatile way to make masters for duplicating





You bet... it takes a specialist to produce accounting machine forms that protect the efficiency of your accounting machines. If your present forms do not record all the information you desire, if they do not register perfectly, if they do not provide perfectly legible copies, if you want *Precision-made* accounting machine forms at an attractive price . . . call in the specialist, your Reynolds & Reynolds Representative.

WRITE TODAY FOR COMPLETE INFORMATION!

THE REYNOLDS & REYNOLDS COMPANY

BUSINESS FORMS SINCE 1866

PLANTS: DAYTON, CELINA, OHIO; DALLAS, TEXAS; LOS ANGELES, CALIF.

OFFICES IN MOST PRINCIPAL CITIES

(Circle 764 for more information)

which makes sense to everyone connected with the business. Such an objective can be stated for a manufacturing concern as "making more and more of better and better products to sell at lower and lower prices."

The fourth essential is to be certain that every person is on the team. He must be on the team as an individual and not simply as a cog in the machine. The key to this is to give people responsibility. Let people work out their problems within the framework of company policy. In addition to individual job enlargement, other company policies also contribute to increasing employee participation.

We have an Advisory Board composed of elected representatives from each department who meet with the President of the company twice a month. The function of this Board is purely advisory, but any and all aspects of the company operation are subjects for discussion at its meetings.

All employees of over one year's service are permitted to buy stock in the company, if they so desire. No special concessions are made to encourage purchase. It is simply sold as a business proposition to those who desire it.

All promotions are made from within the organization and promotions are made strictly on the basis of merit. The best man for the job gets the job. Seniority, by itself, has no influence.

The fifth principle is that everyone must be rewarded in proportion to what they contribute towards the goal. This, of course, is the prime incentive in any cooperative endeavor: just recognition of contribution. Pay is, of course, one method of recognition. But to have it come as a means of recognition, it is important that pay be in proportion to contribution. To honestly and accurately determine a person's contribution, the starting point is a good job evaluation program. To further make our pay scale serve as means of recognition and pay in accordance with contribution, each person receives an incentive pay bonus, at the end of the year. After taxes, reserves, and a 6% dividend have been provided for out of the company's earnings, all remaining money is distributed to workers in a year-end bonus. Each person's share of this

bonus varies depending on what his performance for the year has been. Thus, each person realizes that every saving, every efficiency he creates, adds to the total sum of the bonus to be distributed. Also, these will increase his performance rating, which will be reflected in a larger share of the bonus.

To determine each person's share in the bonus, we employ merit rating. Every worker is rated twice a year on four performance factors, by different people familiar with his performance. He is rated on his skill and job knowledge by his foreman or department head. The inspection department rates on quality; the production control department on quality; and the time study and methods department on general contribution to improvement through cost reduction ideas and effort. This is a comparative rating made by using a common job performance description as a standard for rating.

Ratings are made twice a year, the two ratings being averaged at the end of the year to one final rating. The man with an average rating will receive an average bonus. The total bonus was approximately \$5,000,000 in 1954, which was approximately 100% of the payroll for the year. The average bonus was around \$4,000, which about doubled the regular yearly earnings.

The results we have had with this philosophy of incentive management speak for themselves. Productivity per man in terms of annual dollar sales is three to four times above average. We have reduced the number of direct labor hours in our product since 1934 by 90 percent. The product has remained essentially the same. Real prices in the same period have been reduced by about 50 percent. A 300 ampere welding machine sells for approximately 30% less than it did in 1934. Wages are approximately double those paid in comparable industry. We have never missed a dividend, and the dividend has been 6% for a number of years. Employment has quadrupled.

More important than any of these results has been the effect on the people who have grown with incentive management. The amount of pride, happiness, and satisfaction for the successful ones is immeasurable. m/m

(This article is extracted from a speech given before the Office Management Association of Chicago.)



Amazing New

BRUNING

pries anything typed, written, crinted, or drawn on ordinary ranslucent paper—in seconds.

Specialists in Copying Since 1897

Charles Bruning Company, Inc., Dept. 1204 4700 Montrose Ave., Chicago 41, Illinois

Please send me information on Copyflex Process and the new Model 100 machine.

Name\_\_\_\_\_Title\_\_\_\_\_
Company \_\_\_\_\_
Address \_\_\_\_

(Circle 708 for more information)

Wouldn't you like samples of the world's largest selling pencil?

You'll find

CHEMI-SEALED" MIR A DO 174



# **MIRADO**

smoother, stronger, longer-lasting ...the most efficient your office can use

Are you using the right degree of lead for each job? Write on your letterhead for free samples of

#### MIRADO

No. 1 (Soft)

No. 2 (Medium Soft)

\* No. 21/2 (True Medium)

No. 3 (Medium Hard)

No. 4 (Hard)

### EAGLE PENCIL COMPANY

Department F-6 703 East 13th Street New York 9, N. Y.

(Circle 717 for more information)



# Psychology can help you select

It's not a total solution — but a valuable yardstick — for

Psychologists are performing a variety of tasks in support of management today. Not the most important, but perhaps the most talkedabout, is their contribution to the selection of personnel, especially at the higher levels of management. It is about time somebody stopped for a moment to ask a straightforward question: how much help in selecting executives are psychological tests?

Executives themselves, as judged by their actions, have varied widely in their answer to this question. Such important companies as Sears Roebuck and Westinghouse are relying heavily on tests of all sorts, from simple performance tests to the elaborate ones that measure personality characteristics. Others steer away from tests of all sorts, citing a sad experience or two as complete justification for ignoring any possible help they might receive, or any possible progress that has been made.

When you approach professional psychologists, you don't get much greater unanimity. In some areas, there is fairly universal agreement; in others, you can get into an almost violent controversy.

Part of this is due to the vagueness of the question. It simply cannot be answered clearly. It means various things to various people. Which tests are you discussing? Tests of vision and hearing? Tests of intelligence? Tests of specific knowledge or skill? Tests of emotional characteristics? Performance tests or productive tests? Each of these areas must be considered and judged separately. There are good and bad tests in all these fields, and standards themselves vary.

Next, what do you expect from a test? How much help do you think a test can or should give you? If you expect testing to replace all executive judgment, that is one matter, but if

you ask it to act as another tool, contributing knowledge to your considered judgment, that is something else again. The word *much* is another indecisive word. Can you weigh the cost of the test against the value received? How much do you save, when you consider the entire contribution of the test?

### The performance test

There are three major types of test: performance, aptitude and personality. The performance test is used in hiring workers for a job in which they have had direct experience. If you want girls who will sit at a desk all day and copy manuscripts, you can test an applicant by putting her at a desk and letting her try the job.

Here it is a simple matter, but often the actual job situation cannot be used for testing purposes. Sometimes it would take too long, or would require too much supervision. A truck driver, even though experienced, cannot be sent on an over-the-road trip as a test. At other times, the job you are trying to fill is too specialized, or perhaps the labor market is so tight, that you just can't get experienced workers to apply.

#### The aptitude test

Here is where aptitude tests come in. These substitute other qualities for job performance that are more easily measured, theorizing that skill at these is equivalent to skill (or potential skill) on the job itself. As a simple example, you may recall the radio operator's aptitude test that was given to all Army draftees in World War II. Groups of men were asked to listen to a special test record which consisted of pairs of code signals, some alike, others different. The candidates were asked to mark SAME or DIFFERENT on their score sheets for each of the pairs. Ex-

# executives

management's toughest job

perience had shown that men who had failed in radio operators school, or who were poor operators in practice, made low scores on this simple test, while high scorers generally made good records in training and performance. Hearing tone differences was an important aptitude for this occupation.

This test achieved its objective, which was the cutting down of the failure rate in school. Time could not be wasted on men who could not finish the course. Of course, since no test is perfect, some potential failures were admitted, and some potentially fine operators were barred, but the over-all efficiency was increased enough to justify the use of the test.

There is now a wide choice of aptitude tests. Many have been developed in the last twenty or thirty years. Some have been designed for a specific occupation, while others like GATB (see MANAGEMENT METHODS, April, 1955) are useful for very many different jobs. Some can be administered easily and inexpensively; others are cumbersome and costly. Some are quite precise, while others give results only little better than chance. Some are more able to predict results than the average interviewer, although many fall short of the considered judgment of which an experienced executive is capable.

The most important factor to note when an aptitude test is being chosen is to see that the test measures a quality that is a key one for the occupation in which you are interested. You are trying to find a method of picking out those individuals who have a good chance of succeeding in a particular job. For this you must first decide exactly what success is and this is not always easy. For many jobs, it can be measured directly by unit output, but for others, there is no direct scale. How



\*\*For prompt attention, address inquiries to Dept. M. Addo Machine Co., Inc., 145 W. 57th St., New York 19, N. Y. (Circle 700 for more information)



Executive Jones (above) is ever alert to the terrible possibility of fire. His company has invested heavily in sprinkler systems, fire extinguishers, insurance.

It is ironical that executive Jones (could he be you?) has taken few precautions against two things far more probable, 3 to 5 times more destructive than fire. These are cash disbursement losses and inventory losses, which together account for 80% to 90% of fraud losses today.

Cash disbursement losses occur through either accidental or fraudulent repayment of invoices. They can be prevented by Cummins invoice canceling system, which virtually eliminates duplicate payments and insures that a business gets everything it pays for.

Inventory losses occur through careless or fraudulent handling of company order forms. They can be prevented by Cummins automatic numbering system, which insures that a business gets paid for everything it ships.

You owe it to your business, your employes and your stockholders to guard against these two major losses just as you guard against the lesser danger of fire. If you would like to have a Cummins representative explain in detail how these systems work, and show you how, at the same time, you reduce your accounting costs, mail the coupon below.



Cummins Automatic Numbering Perfarator numbers order sets consecutively with holes you can read, gives absolute control over all business transactions.

Cummins Invoice Canceling Perforator cancels invoices, supporting papers with holes you can read, virtually eliminates dupli-



G Since 1987

Cummins
Business
Machines
sales and
service
offices in
principal cities.

GUINESS AND BANKS SINCE 1887

Division of Cummins-Chicago Corp.

Dept. MM-65 4740 N. Ravenswood Ave., Chicago 40, III.

Please send me full information on Cummins

Invoice Canceling Automatic Numbering

Name

Name of Business

State

(Circle 714 for more information)

CUMMINS BUSINESS MACHINES

do you balance a stenographer's speed against her errors? Which of the various duties of a receptionist are important, and which weight should be given to each? How do you compare the success of one salesman against another, after you make due allowances for differences in experience, territory, product, and all the other factors that differentiate among people?

If you can get over this hurdle, there is a good chance that an expert can set up a battery of tests that will work in that situation. If the job for which you want a test developed is a common one, it is possible that existing batteries can be used, although great care must be taken to ensure that the jobs are similar. If your job has its own special characteristics, then a study will have to be made. You must furnish a group of people in the job, an objective performance rating on each, and persuade your sample to take a large number of tests. There are standard methods for getting reliable results from this start.

### Testing executive personality

The next step is into the jungle of personality testing. Perhaps because this strikes closer to the "soul" of the individual, perhaps because everybody feels his own intuition is to be trusted in this area, or perhaps because this begins to get into the higher executive levels, testing in this field has created more than its share of suspicion. As we move out of the routine occupations, personality characteristics become more important to success. If we are given enough of a sample to study, we can screen for personality characteristics as effectively as we can for those known as aptitudes. Very successful and reliable tests have been developed for such occupational groups as insurance salesmen and department store clerks, and these have met with little criticism. The trouble comes when the same procedures are extended to management.

Typical of the confusion in this area is the article by William H. Whyte, Jr., which appeared in *FORTUNE* last September. The title is *The Fallacies of "Personality" Testing*, which gives a pretty good idea of the author's approach. Mr. Whyte isn't opposed to the testing of aptitudes or of intelligence, because he believes that there are re-

liable tests to measure these. "If he is all thumbs," he writes, "when he puts wiggly blocks together, he won't be very good at a job requiring enough manual dexterity to put things like wiggly blocks together."

This is an aptitude test, and Mr. Whyte accepts it, but he balks at the next step, and right in the next sentence, too. "To jump from aptitude testing to personality testing, however, is to jump from the measurable to the immeasurable." This is a sentence that arouses the wrath of most professional psychologists. They claim that personality characteristics may be equally as important to success as aptitudes, and they see no reason why a measuring device cannot be devised. With equal logic, they might change Mr. Whyte's aptitude comment to this equally valid statement: "If he is all thumbs when he handles test social situations, he won't be very good at a job requiring enough tact to handle similar real social situations."

You must identify a quality that is important in terms of job success, and develop a test which measures that quality, so that those who are good at the job will score high on the test, and those who are poor will get a low score. If you want to apply the name "firmness" to a high score, and "indecision" to a low score, you may find it somewhat easier to talk about the test and to picture the quality-or combination of qualities-it measures. On the other hand, such a selection may confuse things by selecting a word which means different things to different people.

But the real purpose of the test is to improve our efficiency in selecting or promoting employees. As far as management is concerned, this is its only purpose. It is a dollars-and-cents question. The tests may sound silly, they may seem to have no relationship to the job, but if figures prove that they increase efficiency above the cost of administering, they have a part to play in management. It would be helpful to know why they work, to keep improving efficiency, but it is not essential.

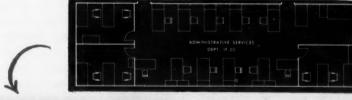
#### **Building an executive test**

Since many people look at test questions, and feel intuitively that they are

silly and uninformative, it might pay us to spend a little time seeing how such questions are collected and validated. A psychologist constructing a test does not choose his questions at random, nor does he put them together on the basis of hunch or intuition. He collects test questions on the basis of his experience-many more than he expects to use—and gives them to as large a sample group as he can obtain. Then he analyzes the scores, not only on the test as a whole, but on each separate item. Some prove to have less correlation with the quality being measured than others. These are discarded completely, or perhaps they are rewritten in an attempt to improve their performance. Next, various combinations of questions are tested to see which give the best results, and thus the test is built. In one test now under construction, ten thousand test questions have been written and are being tried out! Only forty or fifty will be used.

This correlation, this matching of the test scores with the known amount of the quality which the testing is designed to measure, is done on a sound mathematical basis, using recognized statistical techniques. So when you are called upon to judge the value of a test in meeting your problem, there is more to go on than your personal attitude, or that of the psychologist. There is available, if it is a well-constructed test, facts behind it that will help you judge its validity, and you are entitled to know those facts. What sample group was used to authenticate the test? Is it a group similar to the one you want tested? A test for salesmen that has been standardized on the basis of the results with a group of behind-the-counter people might not be very good in selecting door-to-door salesmen. Are the qualities required to sell jewelery in a chain credit store the same as those in a Fifth Avenue establishment? While you can rarely get a test that uses exactly your group as a sample, the closer you come to it, the more likely you are to achieve the kind of good results you want.

Then you can ask about the predictive value of a test. How great a correlation is there between success and score? No test is perfect, but just about all of them are much better than the





#### A TYPICAL PROBLEM AND THE SOLUTION.

The old plan accommodated 17 people using conventional desks and files. In the new plan, El-Units provide greater working convenience and comfort for 20 people and, at the same time, save 20% of the floor area for expansion.

# MAKE ROOM for more people

...in the same space



# ...with Art Metal EL-UNIT MODULAR OFFICES

ally have room and to spare - can provide superior working conditions for executives and other personnel and leave formerly used. space for new employees.

All this is accomplished with Art Metal's El-Unit Modular Offices, com-

Many business offices now "bursting at corporation, individual employees actuthe seams" for lack of floor space actu- ally gained more functional working area in El-Units occupying 30 square feet than they had in the 80 to 100 square feet

El-Units are designed on the modular principal and can be assembled in many layouts to expedite individual work. posed of work tops and filing cabinets Offices can be private, semi-private or in various arrangements. In one large open - with or without glass-topped town 4, New York.

steel partitions - are easy to rearrange as requirements change. You'll find some eye-opening ideas about modern office facilities in the Art Metal brochure offered below.

Call your local Art Metal dealer or branch office - listed in the "yellow pages" of your phone book - or write Art Metal Construction Company, James-



This free brochure covers modular offices in full-shows El-Unit requirements for various jobs, detail plans and demonstration layouts for most efficient use of floor space. Ask for AD-2265.



For 67 years the hallmark of the finest in office equipment and systems

EXECUTIVE OFFICE DESKS, CHAIRS AND CREDENZA UNITS - GENERAL OFFICE DESKS AND CHAIRS - FILING EQUIPMENT - WABASH FILING SUPPLIES - POSTINDEX VISIBLE INDEX SYSTEMS

(Circle 707 for more information)



# **Both folders contain 200 photocopies!**

But just look at the difference in the amount of filing space they take up! That's 200 sheets of super-thin Du Pont "Photo-Writ" W on the right—less than 3/4 of an inch thick. Same amount of conventional photocopy paper at left is almost 3 times as thick! There's the proof—photocopies on "Photo-Writ" W can cut your filing space by more than half.

Get more information on spacesaving "Photo-Writ" W. Mail the coupon below for the free booklet "Du Pont Photographic Reproduction Papers." It contains "how-to-doit" data on all the Du Pont photocopy products. E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware. In Canada: Du Pont Company of Canada Limited, Montreal.

# "PHOTO-WRIT" W



BETTER THINGS FOR BETTER LIVING ...THROUGH CHEMISTRY

	498 Nemours ton 98, Delaw			
Plea	se send me ti			
	Pont Photog	raphic Repr	oduction I	Papers
	Pont Photog	raphic Repr	oduction I	Papers
"Du	Pont Photog	raphic Repr	oduction I	Papers
"Du	Pont Photog	raphic Repr	oduction I	Papers

(Circle 716 for more information)

result of routine interviewing procedures, and usually better than the interviewing done by even an experienced executive. But most important of all, the combination of good judgment backed up by a pertinent test and its results will lead to the highest possible performance.

These are the things to look for, and not whether some of the individual questions seem to you on first glance to have little relevance. Thus, the FORTUNE article's examples of test questions, while interesting, had little pertinence in judging the effectiveness of the complete tests from which these questions were taken. Mr. Whyte's description of the way some consultants work has greater validity, but even here, his conclusions must be questioned. His feeling that this is typical makes most professionals see red.

The American Psychological Association, the recognized professional society, agrees that these examples are horrible, but they do not feel that an extreme example can be taken as typical. Everybody agrees that this, as all new fields, has attracted consultants of dubious reputation and background. These disreputable practitioners attract more than their share of attention, for their claims are not limited by any professional code of ethics. They can make attractive promises of results, which no true professional will do. Since this places reputable consultants at a competitive disadvantage, it is up to management to exercise more than the usual amount of skepticism in judging claims and examining records.

No test that deals, in any way, with that peculiar animal, the human being, is perfect. The selection of personnel, especially at the higher levels of management, is a difficult task, requiring the maximum exercise of executive judgment. Testing today will give you another tool to help you reach the best decision; it will increase the chances of your judgment being right. According to Dr. Fillmore Sanford, Executive Secretary of the American Psychological Association, "If the psychologist claims he can, through standard clinical tests, select infallibly for your job, he's crazy. And if you turn over to him the whole job of selection you are abrogating your administrative responsibility and treating the psychologist as a decision-maker rather than as a technical resource to you."

# The test you should choose

There are indeed difficulties in the use of tests to measure personality, but they are not those which bother Mr. Whyte. One of these is setting up realistic criteria for success as an executive, and then selecting those tests which measure those criteria. To see how this works out in practice, and how bias can unintentionally enter the picture, let's shift our attention to an entirely different field—the selection of internal combustion vehicles. Let us select, by objective testing, the best among a motorcycle, sedan, and six-ton truck.

The first thing to do is to set up an objective measure, one by which we can evaluate each of the candidates, using an impartial score. We can, perhaps, require each of our vehicles to demonstrate its efficiency by moving ten tons of gravel from one spot to another. Do I hear a voice objecting that this is not a fair test? Would shifting the test to the ability to carry a message over back country roads satisfy you?

The successful candidate is determined, of course, as soon as you set the test. The bias is built in. While in this rather far-fetched example the bias is obvious, it is not always so apparent. But after all, you want the test to be biased; you want it to pick the candidate who will score highest on a specific characteristic. The important factor is that the characteristic which the test uses is the one you want to use.

It is up to you to decide which are the important qualities which should be used as a basis for selection. You can do this by testing men who you know are successful, and seeing which tests have the highest correlation with their degree of success. This is easy if you have a large enough group of people who can serve as a base, but in most executive placement the sample is small. Thus, the selection of criteria must be done largely through individual judgment. You must decide what kind of person you are looking for, and define your needs accurately enough so that your consulting psychologist can select the best tests for



THE METROPOLITAN GROUP—in the matchless warmth and beauty of fine cabinet woods. Smartly styled for maximum efficiency. See your IMPERIAL Dealer or write now for details.

IMPERIAL DESK COMPANY Evansville 7, Indiana

(Circle 729 for more information)

your particular purpose.

This individual judgment is not unique to selection by means of psychological testing, for it enters into all personnel work. Whoever does the interviewing, whether it be the President or the entire Board, must set up some ideal, with specific characteristics, against which they measure each applicant. Some of these qualities, such as age, are clear and unequivocal; others, especially when you get into the area of personality, are more difficult to define. Nevertheless, they exist and they must be reckoned with.

The definition of the personality characteristics vital to executive success is the most difficult problem now facing test experts. It is comparable to, and dependent upon, the difficulty in defining success itself. From a practical standpoint, two stages in personnel selection must be recognized. You must first define the required qualities, and then you must find out how they are possessed by a specific individual. The second step can almost always be handled effectively by an objective test in the hands of an expert psychologist. The first step is another matter. It still depends on refined judgment, and much of our current psychological research is in just this area.

#### A course of action

There is haziness and phoniness in the field, and yet there is much that is of help to the executive. How can you find your way through the wilderness? What can you expect to get from a psychologist? How can you reach the right kind of consultant?

There is fairly universal agreement on the answers to these questions among professional men who were asked these questions. The first thing, we were told, is to see that your consultant has professional standing, as evidenced by membership in the American Psychological Association. While this does not assure reputability, you may be sure that the rolls include all psychologists of any standing. Absence on the part of a practicing consultant should be looked on with suspicion. Another factor is an approach of humility on the part of the potential consultant. There are no guarantees in this field, nor are any



# PAYCHECK "OUTLOOK" **ENVELOPES**

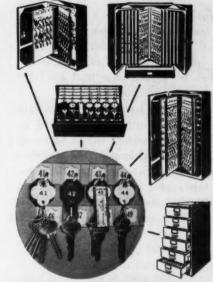
Eliminate Time and Expense of Addressing, also chances for Errors. Paycheck "Outlook" Envelopes are abso-

lutely opaque. Essential hen wages are paid by heck. Nothing shows the employee's name. This improves personnel relations.

Send for Samples and Prices Today

OUTLOOK ENVELOPE CO., Est. 1902 Originators of "Outlook" Envelopes 1001 W. Washington Bird., Chicago 7, Illinois

(Circle 741 for more information)



# Not quite a complete picture

because we can't illustrate the unparalleled convenience and maintenance economy, plus the maximum security, offered by Tel Kee—the only really "complete" key control system—that's so easy to set up and operate too. But we can give you all the facts if you send for our FREE Catalog No. MM-20 today!



The MOORE KEY CONTROL' Systems P. O. MOORE, INC. 300 FOURTH AVENUE, NEW YO

(Circle 738 for more information)



Worth its weight in savings!

Your outgoing mail loses money if it carries too much postage . . . loses prestige and good will if it carries too little, and arrives Postage Due.

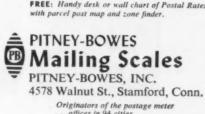
This Pitney-Bowes S-510 Scale, with its high precision, instant acting, automatic pendulum mechanism, gives exact weight, in fractions of an ounce up to 10 lbs. Large, widely spaced markings permit quick, easy reading, save time in mailing. Other PB Scales for any kind of mailing, including parcel post up to 70 lbs. Ask the nearest Pitney-Bowes office to show you. Or write for free booklet.

FREE: Handy desk or wall chart of Postal Rates



Originators of the postage meter ... offices in 94 cities

(Circle 748 for more information)



warranted. Be suspicious of the man who makes either flat promises or offthe-cuff recommendations. Few situations are exactly alike, and slight differences in details can lead to large variations in solutions.

Talk at some length to the consultant you are considering. You will be asking him for advice which you will have to take largely on trust. Be sure the two of you can get along together. Make sure that your consultant has had some experience in the general area in which you want him to work, but don't insist that he have worked on the identical problem.

It may turn out that you are not in a position to use these methods, especially in filling the higher-level jobs in your firm. Your needs may be so specialized and your turnover so small that there isn't enough data from which to draw your conclusions. Or the cost of study may outweigh all of the potential savings.

This points to the crying need today: better data for research and study. The measurement of executive success and the isolation of the necessary qualities is a difficult matter, and it is not made any easier by the limited number of people who are in a position to contribute to the facts. Cooperation of management and the universities can be of profit to all, with business supplying the basic field of study and the universities supplying direction and manpower. There are graduate students who need field work, under the supervision of the psychology staff. Frequently arrangements can be made which are of great benefit to all concerned. It is worth checking with your nearest university.

But whether you work with a university, hire a consulting psychologist, or put a man on your staff, remember that the final decision is yours. You must assume that responsibility, and cannot pass it on to another. As an executive, you have an important prerogative. For your own good, exercise it: be skeptical of all claims, and the broader they are, the more skeptical you should be. But don't swing to the other extreme, and become obstinate. There is a happy medium, and that's the place a competent executive should be able to find for himself. m/m



# Seeburg music goes anywhere

Wherever your business is located—in a large city, a suburb or a small town—you can have the benefits of a Seeburg Music System.

The Seeburg Plan. Highlight of this unusual plan is a LEASE-PURCHASE agreement covering all the equipment. Nominal monthly payments apply toward your eventual ownership of the entire system.

The Seeburg Music. Another distinctive feature of this modern music service is the Seeburg Background Music Library. Every selection has been arranged and programmed for work and atmosphere use.

The Seeburg High Fidelity Music System. Nucleus of the system is the world-famous Select-O-Matic mechanism with capacity of 400 selections of music. And, it's high fidelity all the way. So now, background music and high fidelity reproduction become one and the same thing.

Paging Service. A complete, efficient, easy-to-use paging and public address system is included

Use with Existing Sound System. You'll be happy to learn how simply you can add Seeburg music to any existing sound system.



FACTORIES



OFFICES



BANKS

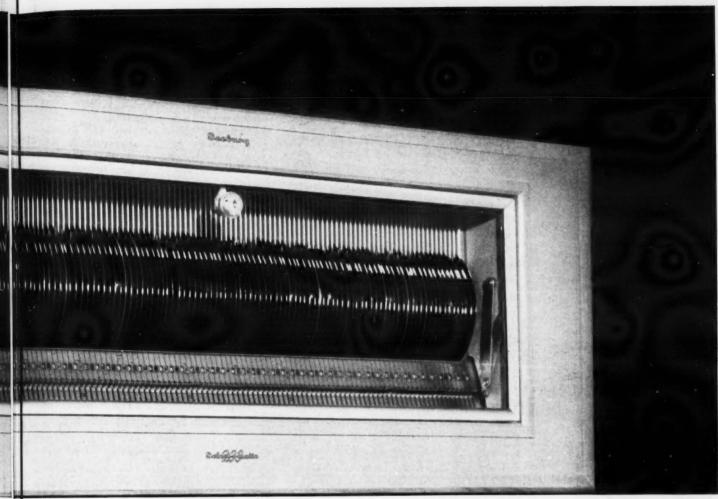


HOTELS AND CLUBS



STORES

(Circle 760 for more information)



The Seeburg Library Unit in modern, attractive, self-contained limed oak cabinet.



The Seeburg Background Music Library. Monthly refresher service. Pressed for Seeburg by RCA Victor Custom Record Department.



The Seeburg Custom Unit, mounted on sliding metal tracks for neat, compact, built-in commercial and industrial installations.

WORK AND ATMOSPHERE	SEEBURG Background Music Service
	J. P. Seeburg Corporation, Chicago 22, Illinois

COPR. 1855 SEEBURG MUSIC LIBRARY, INC.

Please ser Service.	d i	nfe	or	n	18	t	ic	or	1	0	n	4	36	9€	eb	u	r	g	E	38	10	k	g	r	01	u	n	d	1	M	U	S
Name																. 1	Po	S	it	i	01	1										
Company																																
Address.																								. ,								

(Circle 760 for more information)

# diagnostics

by Leslie M. Slote

Ass't. to the Pres. Norden-Ketay Corp. Management and Labor Relations Consultant

Editor's Note: The recent series of articles on Organization Planning (March, April, May, 1955) has been drawing a great many reader inquiries. We have selected some of the most frequently asked questions for Mr. Slote to answer.

question:

Judging by the number of boxes or positions in your organization chart, wouldn't you say that such a plan of organization applies only to the larger corporation?

answer:

Emphatically no! Your initial concept is incorrect, because the number of boxes is not equivalent to the number of positions. If you recall, we mentioned that we are dealing with a functional chart, which shows corporate functions or activities that exist in practically every enterprise, regardless of size. The chart classifies these functions, and then arranges them in logical groupings to achieve maximum coordination through a system of checks and balances. This, in turn, results in minimizing the occurrence of many types of daily operating problems. Under a given set of conditions, many of these functions can be grouped together and assigned to relatively few people. For example, although four boxes are shown under the planning phase of the Sales Department function, in the smaller company, all four boxes or functions may be the job of one man.

question:

Is there any definite size for a department, division, or section? In industry, isn't the division construed to be larger than the department?

answer:

The size of a department, or division, may vary from a few people to several

thousand, depending upon the size and type of the company. The prime factor in determining the limiting size of an echelon, whether it be a department, division, or section, is the convenience or practicability of maintaining adequate supervision over that echelon. In reply to your second question, the terminology we use denotes relative size in descending order as follows: department, division, section, team. If your company has always used "division of the prime factor of the pri

sion" to denote a higher echelon than "department," there is no reason why you cannot continue this practice to avoid confusion. Consistency of use is the major criterion to keep in mind.

question:

What do you mean by coordination, and upon what is it based?

answer:

The broad objective of activity

analysis and the use of the functional organization chart is to achieve coordination of corporate functions. In this sense, coordination means the orderly, balanced arrangement of corporate functions, which harnesses and directs individual and group effort to provide unity of action in order to achieve administrative goals. In the final analysis, the coordination of functions depends upon individuals, and must be effectuated by authority. An executive or supervisor cannot be given the responsibility for coordinating activities unless he is granted the necessary degree of authority. Most of us are familiar with circumstances in which a "staff" man is asked to coordinate some activity which does not report to him. The "staff" man is then in a conflicting situation, and is powerless to coordinate, because he cannot exercise authority when it comes to a showdown. The solution, of course, lies in assigning responsibility for coordinating that activity to the particular line management vested with adequate authority. Coordination becomes a reality only through exact definition of duties, a well-defined chain of command, sharply enumerated responsibilities, and the granting of precise authority at each organizational level.

What is the maximum number of positions that can efficiently report to one supervisor?

There are too many variables to be able to make a quantitative assertion that will apply to most situations. For example, the problem of maintaining adequate supervision over research engineers poses different requirements than would supervising a large payroll section, or a semi-skilled assembly crew. It is obvious that the number of individuals reporting to a given supervisor under a given set of conditions, cannot be more than that supervisor can effectively direct, control, and coordinate. In practice, determination of the span of control for each supervisor is accomplished by giving consideration to such factors as the following:

1. The degree to which the work is

routine, repetitive, and homogeneous in its nature.

2. The physical proximity, and degree of contact and communication between subordinate and supervisor.

3. Calibre and capacities of the particular supervisor.

4. The extent to which policies and operations can be delegated.

5. Whether the supervisor can devote full time to actual operating of his unit, or is distracted by other issues.6. Whether the program is static or

whether it's stable.

7. Complexity of work, quality demanded, and use of discretion and judgment.

8. The degree of teamwork, voluntary coordination and good human relations that are present.

When an executive delegates part

of his responsibility to a subordinate, to what extent is the executive relieved of that responsibility?

None whatsoever! The process of delegation is a prime characteristic of the line operation. An executive is forced to delegate a portion of his responsibility because he initially has been given a greater responsibility than he himself can perform. The process of delegation is one in which a higher position confers specific responsibility and authority to a lower position to carry out assigned functions or duties. Delegation has a dual characteristic because the subordinate as a result of delegation becomes responsible to his superior, and at the same time, his superior still retains all of his initial

questions

responsibility.

Where can I get formal training in organization planning?

answers

Round-table seminars, under competent guidance, are one of the quickest means of acquiring this skill. Your local college, or university may offer such seminars. The Organization Planning seminars at N.Y.U.'s Division of General Education, for example, offers participants an opportunity to bring up their own company problems for discussion and solution. m/m



# design

Delinquent accounts are systematically policed by a new form at The Republic Supply Company of California. The specially devised multiple-carbon, five-part, snap-out form for customer statements gives the credit manager a recap of delinquencies at a glance, by breaking down total indebtedness into monthly aging groups.

The original statement is mailed to the customer. The first copy goes to the credit manager for further processing, and the balance of the copies are put into the customer's ledger file. The two lines below the firm heading read: This statement is a reminder that certain items on your account are past due. We ask that you review the charges shown below and advise us if they are not in order.

Aging balances and total account figures are summarized in the top half of the statement, while itemization of the invoice appears in the bottom half. Carbon sheets are only under the top half, thus eliminating unnecessary detail from the control copies.

#### How copies are used

The credit manager's copies are filed alphabetically in a small ring binder, thus affording compact and complete delinquency information for ready reference. Each control copy has space for entering two payments on account, including resultant revised age groups and grand totals. Space is also provided for notation of telephone calls, letters, references to collections agencies, etc.

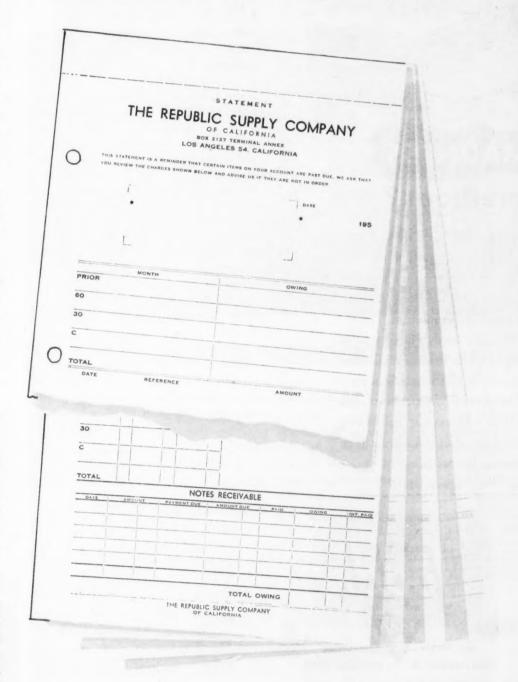
Daily cash postings to delinquent accounts are entered by the accounts receivable clerks in the appropriate places on the file copy of the statement. A carbon copy of such entries is detached and sent to the credit manager for entry in his control copy. He is thus kept fully informed as to the nature and

# Form reduces delinquent account checking, increases collections

amount of all payments on past due accounts with minimum delay.

This form has sharply reduced the

operations involved in checking the status of delinquents, and has increased collections materially. m/m





A new type of office machine, the Shredmaster Bantam 10 portable shredding machine, quickly and effectively destroys confidential office records and correspondence. You eliminate danger of vital papers falling into hands of unauthorized individuals.

What makes the Shredmaster Bantam 10 ideal for office usage is that it is attractive in appearance, quiet, compact, and streamlined. It plugs in just like an electric typewriter or adding machine, and is immediately ready to operate.

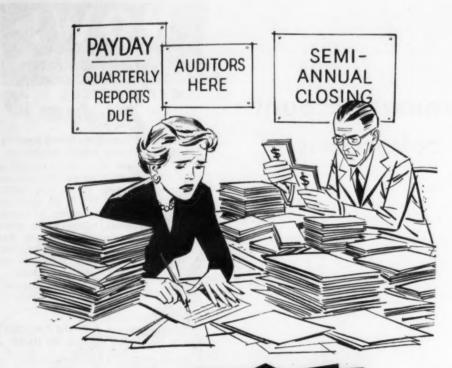
Made by The Shredmaster Corporation, known throughout the world as the leading manufacturers of shredding machines, the Shredmaster Bantam 10 can be operated by clerks, stenographers, or other office help.

office help.

A Free Shredmaster Bantam 10 brochure is available without charge simply by addressing a letter or postcard to

The Shredmaster Corporation 199 Willoughby Avenue Brooklyn 5, N. Y.

(Circle 753 for more information)



# Is there MADNESS in your methods?

We're talking about bookkeeping methods, of course. Often, it's impossible to reorganize bookkeeping procedures *from within*. The department is too busy—growing too fast. Too many demands are being made on it by the Boss, the Government, the Bank, the Sales Force, the employees.

That's where the Todd Methods Study Plan can be of invaluable help. A quick, skillful review of your procedures—plus the experience we've gained from thousands of companies—can result in tremendous improvements in your operation. Our service won't cost you a penny and it may save you from embezzlements, forgeries, wasted effort, expensive overtime, unnecessary paper work.

For complete details, mail the coupon below.

an cost
COMPANY, INC.
Todd
ROCHESTER NEW YORK
SALES OFFICES IN PRINCIPAL CITIE

(Circle 758 for more information)

# thought starters

Thought Starters deal with a "practical solution to a management problem." The Editor invites contributions—which are paid for at our normal space rates.



# How to integrate vacations into a plant shutdown



Edmond W. McNamara, Office Manager The Bassick Company Bridgeport, Connecticut

A simple scheduling form was devised to help our supervisors and department heads to intelligently plan their department vacation schedules. After the personnel department posts notice that the plant will be closed during a particular two-week period, there is a certain amount of maneuvering in working out vacation problems.

Generally, a skeleton force is kept on hand for special rush jobs. Also, certain processes are uneconomical to shut down. This requires that a skeleton crew be on hand in the office to process the necessary papers. More important, accounting requirements mean that certain accounting people must be on hand to get out the financial statements. Further problems are introduced by the increased practice of granting three weeks vacation to people of fifteen years tenure. To top this, married women wish to take their vacation at the same time as their husband's, and he usually works in another company.

Each supervisor gets a copy of the

			1	VA.	CA	TIC	N S	CF	133	W1	3.	60	33									DEPARTMENT		
EMPLOYEE														EXPLANATION FOR DEVIATION FROM SHUTDOWN SCHEDUL										
DA	YS NED	1			-		1				1													
	6-12		F	-	-		1			1	L							L	1					
	20-4					1			1	1					1		Н	-	+		Н	-		
TUNE		27		H					-	H		F	1		F	-		-		-	П			
		30											1			1								
-																								
ATOL	Š	14 83	5	5	S	5	5	15	5	S	5	5	15	8	5	6	5	600	8	5	2			
	11	4	14	10	60	14	14	(4)	14	14	14	14	H	14	113	13	15	14	14	94	H			
		60																						
		7										1	-	-					-			416.6		
	S	9	5	* 5	5	0 00	27	* 10	5	W. 165	* 15	5	5	10 3	10 0	8	× 10	5	× 65	S	5			
		12																						
DOWN		13																	H					
		15																		-	Н			
108	5	16	4 5	5		5	57	5	20.00	5	S	5	100	4 4	5	5		5	- 49	5	5			
PLANT SHUTDOWN		9	1																					
		Ro Ri	-	-																	П			
		22		1																				
	S	24	3	5		S	100	× 63	5	5	5	10	5	S	14.0	4	5	0 13	5	5	× 63			
		25	-	+	1	-																		

form accompanied by a report from the payroll department telling just how many days of vacation each employee has earned. Putting these things down in writing, on a master form, helps bring information into perspective. An explanation is required for any deviations from the shutdown period. This helps the supervisor in his desire to be fair with his employees, and it helps him to present his case to the management.

This form standardizes the data and the presentation that the different department heads must review in passing on the schedules. It then furnishes a reference record to guide them in drawing up the next year's schedule.

# SYSTEMS thought Estarter

# Automatic letter writing dictation saves \$10,000 annually

A streamlined correspondence idea utilizes the world's largest dictation switchboard and saves an estimated \$10,000 annually.

One hundred and nineteen dictation phones are now located on desks throughout the American Casualty Company's 14-story building in Reading, Pennsylvania. Using a share-thephone system in those offices where dictation needs are comparatively light, 150 dictators can be served.

When a dictator picks up the dictation phone, an electrical impulse is sent to an automatic switchboard in the basement. The switchboard, in turn,



shuttles the signal to one of nine recording machines on the third-floor stenographic pool. Eleven pool stenographers type the dictation, and then return the correspondence to the writer by messenger for his signature.

All letters dictated before 2 p.m. are returned for signature by 4:30 p.m. To accommodate the "early bird" and "night owl" dictators, the system is in operation from 7:30 a.m. to 9:30 p.m.

Studies show that the secretaries are able to type 25% more under the new system. This, combined with dictator efficiency, and low initial investment costs, makes for an annual savings which is conservatively set by the company at \$10,000.

For more information, circle number 845 on the Reader Service Card.



# Promotion announcements add prestige, increase morale

Formal announcement cards lend added prestige to promotions of key personnel above the supervisory level, at the American Brake Shoe Company. The cards are sent to the employee's fellow executives, to all department heads, the personnel division, receptionists, etc. Announcements are also featured in the employee magazine, and special notices are posted in the offices. Thus, confusion is avoided and con-



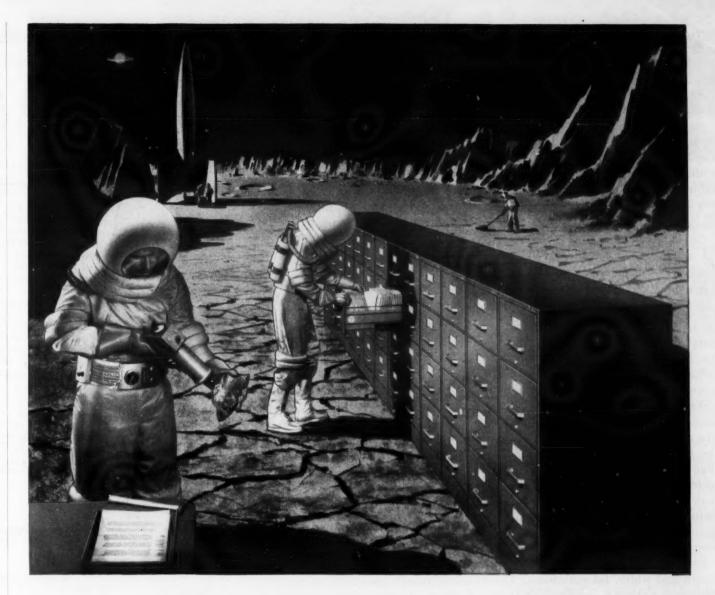
Brake Shoe and Castings Division and

Southern Wheel Division announce the appointment

JOHN F. DUCEY, JR.

Vice - President in charge of division sales

April 1, 1955



# you'll find GLOBE-WERNICKE office equipment everywhere!

Globe-Wernicke's Safeguard Filing System, Tri-Guard Principle and Globe-Guard File Cabinets comprise the most advanced filing accommodations in America today. Safeguard employs various guides, tabs and colors to effect the logical order and instant recognition so necessary for quick, easy filing and finding. This exclusive system works best with Globe-Wernicke's proven three-point principle of file folder support—Tri-Guard. Tri-Guard keeps file contents in an orderly position with ample working space at all times.

When housed in famous Globe-Guard Filing Cabinets, Safeguard and Tri-Guard attain their fullest efficiency because these cabinets incorporate every conceivable feature for easy operation, long life and highest efficiency. And isn't it remarkable that all this "workability" is wrapped up in such handsome units!

Your Globe-Wernicke dealer will be glad to demonstrate all of these products. He's listed in the "Yellow Pages" of your phone book under "Office Equipment." Or write us direct.







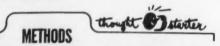


MANUFACTURERS OF THE WORLD'S FINEST OFFICE EQUIPMENT, SYSTEMS, FILING SUPPLIES AND VISIBLE RECORDS
(Circle 723 for more information)

tacts simplified as he starts the new job.

On the day of promotion, about 100 additional cards are presented to the employee, to be sent to other business contacts who should be informed of the change, to friends, family, etc.

Cards are printed when appointments are decided, well in advance of the time they take effect. These announcements not only have practical value in facilitating easy contacts, but pay off in the good will they create.



# One writing on "shingled" form records data on correct sheets

Maintaining inventory control records by product, while recording orders for filling, was accomplished by the Delicia Candy Company, New York, through the use of a "shingled" form.

The "shingled" ticket consists of an original order form separated from five copies by a single carbon. Each of the five copies extends 1/2 inch lower than the preceding one. All copies coincide with the five spaces on the original, which are used for detailed information on each item. This includes quantity ordered, price, extension, item, unit, and weight.

Each "shingled" copy is uniform in length and width, for easy filing. The "shingled" ticket has saved posting time and has provided a convenient manual method for maintaining "by product" controls, without special equipment.

For more details, circle number 839 on the Reader Service Card.



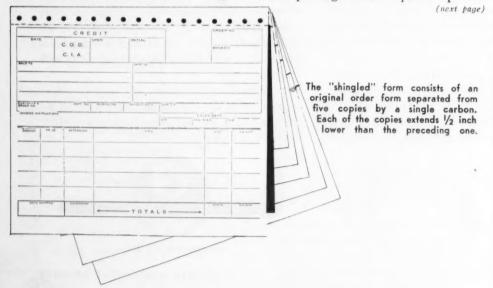
# New system reports firm's shortage problems faster

Factory "trouble" or shortage conditions that cause production delays can now be reported immediately by a newly installed telescriber system at Northrop Aircraft's Hawthorne plant.

Telescribers transmit handwritten communications instantaneously from 37 outlying areas to eight receivers located in the Manufacturing Central Control Department. The system eliminates the need of telephones and permits messages to be completed without an operator being present at the receiving station.

The Central Control is the "heart" of the system, and the only source from which information is channeled, whether incoming or outgoing. When a "behind schedule" item is reported, the information is immediately transferred to the Master Records, indicating need for corrective action, and providing the means for status and progress reporting. A new type of visual shortage board is used for the Master Records. Both sender and receiver of the message maintain post index wall holders and pockets. This provides identical information at both ends, and eliminates the possibility of error.

Used in conjunction with the telescriber equipment is a battery of bookkeeping machines which record all transactions handled by the records section of Production Ordering. This machine posting method speeds up and



# What experts are saying about

This is the most important book on office work simplification, systems, and procedures published in the last decade Targely etnioned in the last decade. Largely stripped of theory and purely discursive materials, it combines the practical "how to" treatment with the management approach as tried and proved by some of the leading authorities in the Thirty-two sections each reproduce

the best of the workshop discussions and illustrations. If this book suffers Nation. from the fact that each section is independent of those that precede or succeed it, the loss is amply repaid by the inclusion of such a Wealth of experience in the fields discussed. For top management as well as for those whose executive respon-

for those whose executive responsibility extends to developing maximum office efficiency, this book will be a manual for many years. It is readable, and well printed.

Each subject is covered by a practical businessman, or by several men, each personally concerned with how to simplify and reduce the cost of running a business. Each has avoided "theory", and devoted himself to proved in-practice solutions. The purpose of this book is to exchange practical ideas. It is a solid, fact-full presentation, organized and illustrated by the staff of MANAGE

leview

magement," Man-

Inc. 514 pp. the 7th annual

stems and Proced-

America.

Office Executive May 1955

. . I cannot resist writing and congratulating you and the Systems and Procedures Association on "Workshop for Management." Not only is the book beautifully put together but it seems to be an extraordinarily effective manage-

**American Business** 

April 1955

A. ROBINSON

#### The Research Institute of America, Inc.

. . . May I compliment you on the finished product, "Workshop for Management"? Frankly, I had not expected to see such a handsomely bound and printed book. After seeing the finished product, I have revised my estimate of the value of this work, as anyone taking time to read the product should be well rewarded for his time, despite the informality of the writing.

FRANK GRIESINGER

#### **Assistant Treasurer** The Lincoln Electric Company

. . . This is truly an impressive job of editing, publishing and book making and it should prove a valuable reference source to us.

**Advertising Manager** The Standard Register Company

. . . Wish to add our accolade to those I am sure you have already received.

MENT METHODS magazine.

BENJAMIN R. MAKELA

# Publication Manager, THE CONTROLLER

.. From a presentation standpoint alone, it is one of the finest books I have ever come across.

E. W. MC NAMARA

Office Manager, The Bassick Company

. . . We consider this of decided interest to our membership.

PHILIP N. SCHUYLER

**Field Secretary** 

36

HOW THE

A col

Most 1 manag That's

lishir

2) I money

1) 7

is feat 

In add

How You v sitting the T proble operat

Wha Consu is cov each p and d

Isn't proc

"speed practi fact-f How

subj Each rooms

place

HOW MAJOR AMERICAN FIRMS IDENTIFY AND SOLVE THEIR OPERATING PROBLEMS

### WORKSHOP FOR MANAGEMEN

A collaborative publishing achievement of  MANAGEMENT METHODS MAGAZINE **SYSTEMS AND PROCEDURES** 

WORKSHOP MANAGEMENT

Most business books today are written for "technicians." The management man gets lost in jargon after the first few pages.

#### That's where WORKSHOP FOR MANAGEMENT differs:

- 1) This book wasn't "written" at all-it's a word-for-word transcription of one of the most complete management conferences and workshops ever conducted.
- 2) It is slanted specifically for management, using non-technical language, and reporting in terms of end results.

With this in mind, glance at the partial Table of Contents and you'll see why we are willing to offer it to you on a firm, money-back guarantee basis.

#### A practical symposium on electronics

In addition to covering all major areas for improving management methods, special emphasis on Electronics for the Office is featured in both the general conference addresses and panels,

You won't want to read it from cover-to-cover at one sitting—or even a dozen. You will want to glance through the Table of Contents immediately for quick help on problems that concern you right now. Since most internal operating problems overlap in many fields, you will also want to refer to the detailed index that coordinates all information in the 516 pages.

Consult the Table of Contents. Each of these subjects

is covered by a practical businessman, or by several men, each personally concerned with how to simplify and reduce

the cost of running a business. Each has avoided "theory and devoted himself to proved-in-practice solutions.

No! Unlike most conferences, there were very few "speeches." The purpose of this meeting was to exchange

practical ideas. Careful editing has removed all purely local asides and repetitions. What remains is a solid, fact-full presentation superbly organized and illustrated!

How was it possible to cover so many

subjects in a three-day conference?

how now-perfected equipment can be applied to their operations. Under normal conditions, a company can expect at least a twelve-month lag between a decision to "get the facts" and actual ability to evaluate whether or not electronics applications are feasible for them. This publishing achievement can materially reduce this time lag.

\$19.00

516 pages

How should "Workshop" be used?

What about the subject matter?

Isn't this just another "book of

proceedings"?

300 illustrations

### PARTIAL CONTENTS

as well as in the Seminars. The Seminars, in particular, are designed for the so-called "beginners," as well as for the par-

This information is of special value at this time. Electronics

manufacturers have made tremendous strides in the last twelve months in developing practical office applications. The only thing that stands in the way of another development spurt is the time it takes potential users to educate themselves as to

#### I. ELECTRONICS SECTION

tially-informed executives.

150 pages of practical information on electronics development, personnel problems, equipment and applications—Orientation in Electronics, Initiating an Electronics Program, Preparing for the Automatic Office, Accounting Machine Developments, etc.

#### II. GENERAL MANAGEMENT

- A. Operations Research Techniques Products Problems Problems
  Incentive Plans
  Executive
  Clerical
  Shop
  Sales
- Supervisory
  C. Methods and Procedures
  Organization
  Responsibility
  Function

D. Office Layout
Department Locations
Modular Planning
Space Control

#### III. TECHNIQUES & APPLICATIONS

- A. Clerical Control
  Cost
  Simplification
  Measurement
  Analysis
  Personnel Utilization
- Records
  C Quality Control
  Statistical Sampling
  D. Communications
  Remote Data Transmissi
  Facsimile Devices
  Industrial T. V.

#### 5-day Free Examination Privilege

Use coupon below or order card bound in this issue

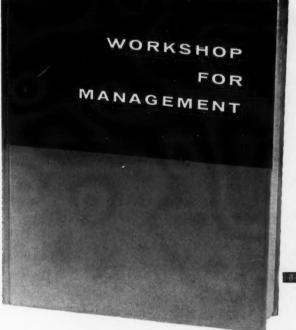
Management Magazines, Inc., Suite 106 141 East 44th Street, New York 17, N. Y.

Please send me for 5 days FREE EXAMINATION a copy of "Workshop for Management." Within 5 days I will either send payment for \$19, or return the book without obligation.

NAME .									 		 													
ADDRESS						 			 							 						 		

Each attendee had his choice of three sessions he could attend. These sessions ran simultaneously, in different rooms. Obviously, a man could not be in more than one place at one time. But you—with this volume in your hands-can cover the whole conference.

et e allaminiskalman, set her mederrekteri gant for er fer it ferkinninklicher





ABOVE: At the Central Control point of Northrop's telescriber system, personnel keep continual tab on factory "trouble" or shortage conditions that could cause schedule delays on their produc-tion line. On the vertical board at left a record of matters needing corrective action is maintained. BELOW: In an outlying factory area, use of a telescriber provides instantaneous handwritten communication to the central control point.



standardizes the posting operation, and makes records which are easily read.

Through the use of the rapid intercommunication procedures afforded by the system, Northrop anticipates it will be saving \$175,000 annually.

For more information, circle number 838 on the Reader Service Card.

### ADVERTISING thought & starter

### How timing will improve the impact of one-shot advertising

An off-season distribution of advertising calendars by the Rumford Press of Concord, N. H., is a good example of how a costly public relations effort can be lifted above the routine. Timed to reach the market three months after the huge January rush of calendar mailing, the Rumford calendar boasts a much higher rate of user retention. The current calendar runs from April, 1955 to March, 1956. Each of the twelve pages features a full-color photograph of a New England countryside.

The biggest drawback in the calendar type of advertising has always been that the consumer can't use the dozen or more calendars he often receives in the Christmas mail. This stiff competition has made what is otherwise a logical



The El Paso Natural Gas Co., El Paso, Texas. Carroll and Daeuble, Architects

## Mills Movable Walls keep office layouts permanently efficient with Space Control



A TYPICAL EXECUTIVE OFFICE—showing some of the more than 5,000 lineal feet of Mills continuous convector enclosures and custom bookcases used throughout the El Paso Natural Gas Co. building.

Write for the informative 68-page Mills Walls Catalog—it's a practical workbook on Space Control. The El Paso Natural Gas Company promotes efficiency and morale in its new headquarters building by providing its employees with pleasant, business-like surroundings and well designed offices. Space Control, assuring permanent efficiency of office layouts, has been achieved through the use of more than two miles of Mills Movable Walls to form these modern business interiors. Whenever changes in space requirements occur these walls can be rearranged to fit new layouts quickly, easily and at very low cost—usually overnight or during a week end. Fully insulated and soundproofed, Mills Walls are unexcelled in architectural design and structural stability—and they require no maintenance whatever, except occasional washing to keep them looking always their efficient best.

THE MILLS COMPANY, 962 Wayside Road, Cleveland 10, Ohio

MILLS Movable METAL WALLS

(Circle 736 for more information)

retention item one of dubious value. This holds particularly for a firm that devotes a substantial share of its promotion budget to this one-shot effort.

It is worth noting—and considering—that elaborate Annual Reports probably face the same hazard. Most Annual Reports are distributed during March. If the aim of the Annual Report is "advertising" rather than financial, an off-season Progress Report might also be worth considering.

### PENSIONS thought Batarte

### Firm originates expense-paid pension plan for employees

A pension plan which covers all employees on a retroactive basis, and is paid for entirely by the company, was recently put into effect by the H. D. Lee Company of Kansas City.

The plan was originated and wholly conceived by the company, and then presented to the various employee unions for approval. It provides for an annual pension to be paid in monthly installments, for life, after retirement at 65. An estimated 3,200 employees will participate.

The amount of the annual pension is one-half of one percent of the employee's average annual income for the last five years, multiplied by the number of years he has been continuously employed by the company. Credit will also be given for all prior service with the company.

Neither the employees nor the unions will contribute to the fund or take part in its administration. Payments to retired Lee workers from the pension fund will be in addition to benefits from social security or individually held insurance plans.

#### 

THE 2 ND ANNUAL
BEST PLACE TO WORK
AWARDS

FOR OUTSTANDING EXAMPLES
OF OFFICE LAYOUT AND PLANNING

FOR ENTRY BLANK AND RULES

See page 20 for complete details or circle number 800 on the Reader Service Card

CONTEST CLOSES JUNE 21

### work center

"... men and machines don't work in a vacuum. Though you may saturate your Work Stations with skilled workers and modern tools, they can produce efficiently only when 'community' factors like traffic control, and adequate lighting, and proper communications — and even creature comforts are properly integrated." wintegrated office

### After you decide not to move

### How to modernize your old office building

Modernizing a fortyyear-old building, rather than moving or building, proved to be the most practical solution for the office problems of the General American Life Insurance Company in St. Louis. It was apparent to their management that if the company was to continue to grow and maintain its efficiency and employee morale, a major internal transformation was necessary.

Officers studied the many new life insurance company home offices that had been erected in recent years in various parts of the country. They came to a realistic estimate of the cost of building a new home office structure adequate in size and function for the present and projected operations of the company and its 620 employees. They also studied the prospects of St. Louis' downtown area as a continuing busi-



TOP RIGHT: The old lobby of General American Life Insurance Company was constructed in 1914 and remained unchanged until this modernization. ABOVE: View of a portion of the new lobby shows completaly re-designed entrance. Cover photo shows fuller view of modernized entrance.



Renovating cost about \$10 per square foot opposed to \$20 per square foot of new building, plus land cost Structurally sound steel and concrete frame

Exterior surface generally acceptable in appearance and condition

Downtown location convenient for employees and business associates

Space per floor (12,000 sq. ft.) above minimum considered necessary for efficient insurance company operations in a multiple-story building

Two floors, which are now rented, will be available for future expansion

### Building designed as a loft-type structure

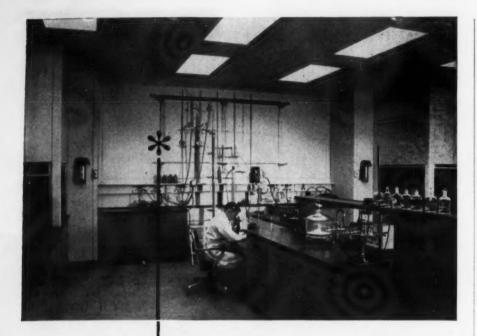
Obtrusive columns every 191/2 feet hampered layout Bare, rough concrete floors hampered maintenance Outmoded, inadequate lighting system fell below

minimum candle power requirements Power system complicated by both AC and DC service

Overtaxed power system prevented additional outlets Old radiators prevented zone or humidity control

Poor ventilation resulted in hot, humid summers and stuffy, overheated winters

Untreated plaster walls and ceilings increased noise from machines and office traffic



HAUSERMAN MOVABLE WALLS

### Save Firestone \$30,299

IN MAINTENANCE COSTS ALONE

• In the modern Firestone Research Laboratory, dirt is not tolerated. As a result, walls are washed frequently. Yet, even after ten years of repeated washing, Hauserman Movable Walls still do not require repainting.

Result: Savings of \$30,299 . . . the cost of repainting comparable ordinary walls at normal intervals.

Equally important is the permanent assurance that these versatile, modern walls can be quickly and easily rearranged, again and again, when and as changing space requirements dictate.

Lifetime finish... permanent flexibility to meet changing space needs... two good reasons why Hauserman Movable Walls save money wherever they are used! Don't they suggest an idea to you?

Wauserman
Movable Interiors

Provided the provided the provided to the prov

Provide Earlier Occupancy - Fire Resistance - Sound Control - Utility Access In Offices - Laboratories - Hospitals - Industrial Plants

> > Zone\_

\_\_\_ State

(Circle 727 for more information)

BEFORE



LEFT: Typical work area in 1943 illustrates overcrowded working conditions and inadequate lighting. BELOW: Same area today offers spaciousness and light, due to re-design and modern equipment.

AFTER



BEFORE



LEFT: Old tabulating department had drab appearance. Unsightly pipes lined walls and ceiling. BELOW: New tabulating area features cork floor and acoustical ceiling for noise absorption, and inset strip lighting.

AFTER



ness center, appraised the present location of the company's building in relation to the anticipated development of the downtown area, and investigated costs of modernization. Their present building, although outmoded, was structurally sound. They decided that an extensive modernization and improvement program to convert the unsatisfactory interior of the building into modern, functional office space, within the limitations of the physical structure itself, was the best choice.

The services of Wedemeyer and Hecker, architects, were engaged in the fall of 1951. In consultation with officers and supervisors of the company, each department was carefully analyzed in the light of its own operation.

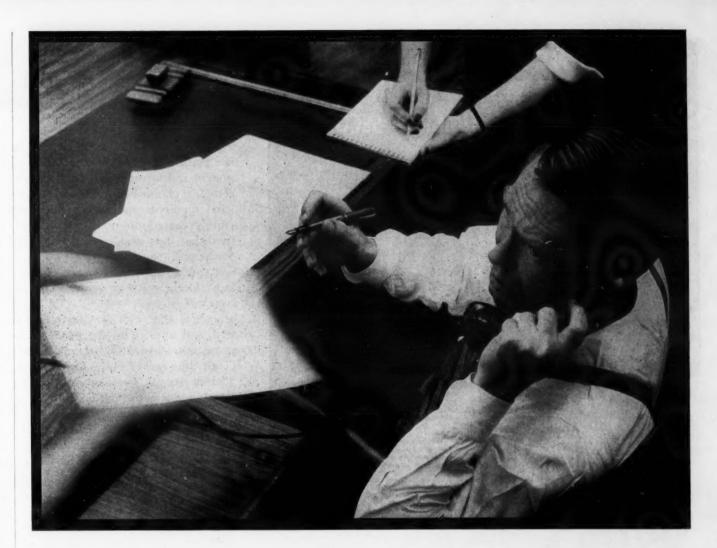
The number of personnel, desks, files, and all other equipment and furniture were studied in relation to the internal-functioning of that particular department. Then, each department was correlated to other departments in accordance with its relationship to them. Departments were assigned to particular floors with a view to holding inter-floor traffic to a minimum.

Plans were laid to proceed floor by floor with the improvement program. Inasmuch as the building could not be vacated, but had to be kept continually in use for the operation of business, certain floors were set aside for the people to be moved into on a temporary basis until the modernization of their floor could take place. Thus, the entire program of rehabilitation and modernization was accomplished while company operations were continuing without any let-up.

The entire building is now air conditioned. In 1941, the first five floors had been air conditioned by a 250-ton centrifugal compressor, with fan rooms on each floor. A similar installation for the remaining seven floors was made as part of the remodeling program. The system was carefully designed to meet the requirements of each floor in accordance with the usage of the floor. Complete and efficient zone controls were installed. On most floors, five zones were required.

All twelve floors are now provided with year-round air conditioning, cooled and dehumidified in summer and warmed and humidified in winter.

(next page, please)



### Business hubbub can be hushed

### Fire-safe Fiberglas ceilings soak up office racket!

The busier the office, the noisier! Fortunately, as much as 80 per cent of the bustle of business can be absorbed by a ceiling of Fiberglas\* Sound Control Products. And, with a Fiberglas Ceiling on the job, employee efficiency and morale go up, absenteeism and costly errors go down!

Beauty from the beginning—In the full line of Fiberglas Sound Control Products you can choose a ceiling tile that



Sonofaced\* Acoustical Tile—Interesting new beauty and utility in this smooth-surfaced, washable, plastic-faced tile. Available in white and a variety of attractive decorator colors.

exactly suits your offices. And all of the tiles in the wide range of colors, patterns and textures available are certified fire-safe by leading laboratories.

Economy to the end—Surprisingly enough, Fiberglas Sound Control Products, for all their extra value, are the lowest cost fire-safe acoustical products on the market today. These inorganic products will never shrink, sag or swell . . . they're easily installed, easily maintained through long years of service.

Free Booklet: But see for yourself how Fiberglas Acoustical Products can improve working conditions in an office. You'll find the full story in the idea-filled booklet, "The Ceiling That Cuts Overhead." For your free copy, write: Owens-Corning Fiberglas Corporation, Dept. 174-F, Toledo 1, Ohio.

Fiberglus, Sonofaced (Reg. U. S. Pat. Off.) Striu and Noise Stop are trade-marks of Owens-Corning Fiberglus Corporation



SOUND CONTROL PRODUCTS

Textured, Perforated, Sonofaced\*, Stria\* Acoustical Tile
 Textured, Sonofaced Ceiling Board, Noise-Stop\* Baffles

(Circle 742 for more information)



### In 300,000 Sq. Ft. Plant!

Huge as the J. L. Clark plant is, Lamson's Airtube Automatic Switch System has brought the farthest departments only seconds away from each other.

Lamson has reduced hourly trips to merely 1 or 2 daily to handle bulky items. The handling of correspondence, time cards, instruction sheets, shipping schedules, receiving slips, memorandums and requisitions between departments has increased in speed and efficiency. Executives save valuable hours of "between office" time. Supervisors can devote more time to "on the job" supervision because they're freed from message carrying.

Lamson Airtube carriers . . . also bearing small product samples and tools . . . automatically discharge at any pre-determined station. The correct station number is dialed by turning the bands on the carrier.

For complete details as to how Lamson can improve the speed and efficiency of communications in your plant, MAIL THIS COUPON TODAY.

	Lamson Corporation, 3726 Lamson Street, Syn Please send me a free Switch System" Bulletin	acuse, New Yo		Automatic
Plants in Syracuse and San Francisco	COMPANYADDRESS		TITLE	
Offices in Principal Cities	CITY	ZONE	STATI	E
	Hon 19			\$.

(Circle 732 for more information)

Ceilings on all floors were lowered to provide space for the air conditioning ducts. This permitted the installation of recessed lighting fixtures. Fluorescent lighting was used in all work areas. A special controlled lens diffuses the light and prevents glare.

Adequate electric, telephone, and office machine outlets were provided for present and future use in the floors and columns, eliminating the maze of open wires on floors and aisles, which previously caused not only an unsightly condition, but a serious tripping and fire hazard.

A ceiling suspension system of metal lath channels and gypsum board was installed on all floors. A fibre base acoustical tile, with random hole pattern, was applied to the board. This suspension allowed for the concealment of all duct work, pipes, conduits, etc. The degree of sound absorption has greatly reduced the clatter and noise of routine office work.

Asphalt tile was selected as the general floor covering. Cork tile floors were used in some small areas where sound absorption to the highest possible de-

gree was required. Some areas and offices were wall-to-wall carpeted.

The old building had two front passenger elevators and two rear elevators used for both freight and passenger service. The front elevators were completely modernized, and changed to collective signal control with automatic power-operated doors.

Full recognition was given to the psychological effect of color on the people who work within the building It was decided *not* to use one or two "standard" green or buff paints, but to carefully choose colors for their pleasing effect on people.

In areas where high light intensities were required, no paint or color with greater than 58% light absorption was used. Also, in areas and on surfaces that could be easily dirtied, or where traffic was heavy, darker, more durable colors were selected. No two floors have the same scheme or the same color shades. Soft green, warm greys, blue, yellow, beige, browns, and flattering rose tones were used together as harmonizing colors, blends, and in color contrasts. m/m

### BEFORE

LEFT: A corner of the old lunch area. Crowded conditions forced most employees to eat lunch at their desks. BELOW: The new lunch area easily accommodates all 650 employees in the space of an hour. There is also an adjoining lounge area for employees who have finished eating or are waiting to be served.







because everybody prefers wood—and responds to it!

why do office workers respond in the presence of wood furniture? Because they're people—and their response to nice things is similar to yours. Like you, they prefer wood's beautiful ingrained individuality . . . wood's unique touch—warm and friendly . . . wood's tranquil quietness. Their attitudes quickly reflect the significance of your decision to provide wood for everybody. Efficiency, output, morale rise. Errors, absenteeism, employee turnover drop. You get and keep finer people. There are wood desks and chairs to fit your every office requirement. For a complete new office, or a single chair and desk, see your Wood Office Furniture Dealer. You'll find everybody works when everybody works on wood.

Attention School Boards: Make sure your schools get the psychological and economical advantages of wood school furniture.





### WOOD OFFICE FURNITURE INSTITUTE

730 Eleventh Street, N. W., Washington, D. C.

See your COPS Dealer for coordinated, correct CERTIFIED OFFICE PLANNING SERVICE. He is equipped to handle your entire office modernization, from start to finish, including layout and decoration—all at no extra cost. You benefit from the knowledge of experts. Write for name of nearest COPS dealer, and your free copy of our full-color booklet about wood's advantages and all about COPS.

Members of the Wood Office Furniture Institute:

ALMA DESK CO. • CARLTON-SURREY, INC. • HIGH POINT BENDING & CHAIR CO. • HOOSIER DESK CO. IMPERIAL DESK CO. • INDIANA CHAIR CO. • INDIANA DESK CO. • JASPER CHAIR CO. • JASPER DESK CO. JASPER OFFICE FURNITURE CO. • JASPER SEATING CO. • THE LEOPOLD CO. • MYRTLE DESK CO. • THOMAS FURNITURE CO. • WELLS FURNITURE MANUFACTURING CO.



WOOD LASTS LONGER.
Thousands of desks and chairs
still performing beautifully,
even after 50 years.



WOOD "WORKS" BETTER. New convenience features, scientific finishes make sitting, working, seeing, easier.



WOOD IS QUIETER. Less noise-distraction means greater efficiency.



WOOD COSTS LESS, and less to maintain. Won't dent, buckle spring or rust



WOOD IS MORE PLEASANT TO TOUCH. No winter chill, no summer roast; no annoying



WOOD COORDINATES
BETTER. Buy today, add pieces
next month, next year—anytime.

### EXECUTIVE SWIVEL ARMCHAIRS



65 executive posture chair. Luxurious proportions. Deep foam rubber cushions. Designed for the top man. \$19725



1800B executive swivel armchair. Answer to the need for low price with full measure of traditional Harter quality.

## CHECK THIS GUIDE TO CHAIR STYLES

There's a Harter Model for every office chair need!

This is just a sampler!

Matching side chairs are available for use with all Harter executive swivel armchairs.

SPRING-BACK CHAIRS



57-5 is typical of the Harter "Comfit" line that also includes saddle seat styles and models with tubular steel bases. \$5275

RIGID-BACK POSTURE CHAIRS



26 secretarial posture chair. Easy handwheel controls. Quality construction at only \$2690

All prices slightly higher South and West



C-1500 swivel armchair. More executives have found comfort in this than any other office chair. Clean masculine lines. \$8150





NEW informative booklet, "Posture Seating Makes Sense," tells what you want to know about modern executive seating for efficiency, comfort and good health.

Harter Corporation 606 Prairie St., Sturgis, Michigan

Send illustrated literature and name of nearest Harter dealer: "Posture Seating Makes Sense" —Executive Chairs, "Reception Room, Conference Room Chairs, Stenographic Chairs.

Name			
Address			

State

(Circle 726 for more information)



Leo M. Cherne Executive Director

The Research Institute of America, Inc.

> Mr. Steinhilber of Clark & Gibby Inc.



where they

OFFICES

EXECUTIVE DIRECTOR of the Research Institute of America, Leo Cherne, asked his office designer for quarters that would be "as comfortable as a living room, and as efficient as a submarine." The two photographs illustrated here reflect how well the designer followed these instructions.

On the "comfort" side, elegance and warmth are provided by handsome wood paneling, comfortable and colorful seating, and provision for Mr. Cherne's valued art objects, including some of his own pieces of sculpture. A heavy black carpeting with flecks of mustard make a striking contrast with other colors in the room. A sofa near his desk and a "conversation seating" next to a coffee table provide two comfort-

able situations for informal talks held in the executive office.

Efficiency-wise, much has been done with a comparatively small room, only 14' x 20' in size. Directly behind Mr. Cherne's customdesigned desk, there are wall-towall bookcases and cabinets. These have been provided with sliding doors for quick reference and for easy filing of pamphlets and brochures. On the opposite wall, the designer has used a five-foot indentation to house a complete unit with Hi-Fi set-up, TV, refrigerated bar, and storage place for records and books. This unit, like all the wood in the room, is finished in warm grey walnut. Lighting units are built into the acoustical ceiling. Behind the desk, fiber glass cur-

### work

SUCCESSFUL MEN





tains assure natural lighting. The curtains also create a spacious, open feeling.

It should be particularly noted that, in spite of the obvious elegance of this office, there is no ostentation. m/m

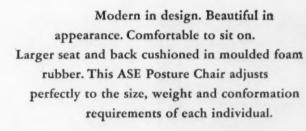
# a.S.E. chair fits them all





Adjustable seat height re-Back tilts to relieve fatigue. lieves under-knee pressure. Adjustable spring tension.

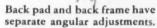




No. 840 Female Posture Chair







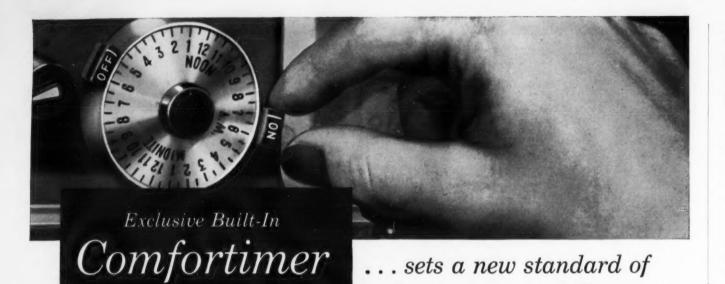


Back height adjusts to provide proper support.

see this chair at your A.S.E. dealer or write

Aurora, Illinois

(Circle 703 for more information)



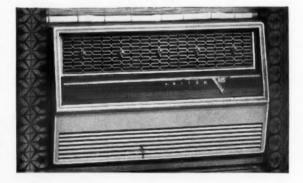
### **New PHILCO Air Conditioner** Turns ON and OFF Automatically at Any Pre-Set Time

For the first time, an advanced design room air conditioner that turns ON before you arrive, turns OFF after you leave. Just set the Comfortimer once for the entire season. Go to work each morning to a pre-cooled office or place of business. Leave at night without worry about turning the air conditioner off. You can't forget itit turns itself off. This new Philco cools only when you have need for cooling. No wasted electricity. Lower operating costs.



#### Extra Skip-Day Switch for Week-Ends

When you plan to be away for a day or week-end, the air conditioner can be set in advance to skip the desired time and start cooling just before you come back. New Philco Comfortimer models are available in ¾ H.P. (85-M) and 1 H.P. (105-M).

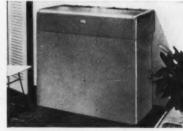


Convenience and Economy



Solves Casement Window Problems

Full capacity ¾ H.P. air conditioner is all inside the room. Nothing extends outside the building. Fits casement windows without cutting frames or venetian blinds. Philco 284-M.



Philco 2 H.P. Console

Extra capacity for cooling up to 1900 sq. ft. of room area. Perfect for stores, shops or large offices. May be installed with ducts to cool more than one room. Philco 1204-K.

Other Philco Air Conditioners available from 1/2 H.P. to 71/2 H.P.

### PHILCO AIR CONDITIONER, Dept. N-6 C & Tioga Sts., Philadelphia 34, Pa. Please send me, without cost or obligation, more details on the Philco Air Conditioner with Built-In Comfortimer. Individual\_ Company Name\_ \_Zone\_

Mail Coupon for Free Literature

### Chart details requirements for furniture rests

A specially designed chart sets the requirements of furniture rests for various types of floor coverings. Prepared by the Armstrong Cork Company, the chart is based on the specific requirements of the weight of the furniture (per leg) and type of floor construction.

The principle of the furniture rest is the distribution of the weight of the furniture over a wider area, allowing more of the floor to share in the sup-

#### **Furniture Rest Size Chart** Size of Rest or Cup Required

Weight (Per Leg) of Fully Loaded Furniture	Linoleum and Plastic Flooring	Linotile	Asphalt	Rubber	Cork
Up to 50 lbs. Per Leg	1-3/16" dia.	1-3/16	1.5/8	1-3/16	1-5/8
50-100 lbs. Per Leg	1-5/8	1-3/16	2-17/32	1-3/16	2-7/64
100-150 lbs. Per Leg	1-5/8	1-3/16	1-3/4	1-3/16	2-17/32
150-200 lbs. Per Leg	2-7/64	1-3/16	2	1-3/16	2-17/32
200-250 lbs. Per Leg	2-7/64	1-5/8	2	1.5/8	2-17/32
250-300 lbs. Per Leg	2-17/32	1.5/8	2	1-5/8	2-17/32

porting job. The heavier the weight per leg, the larger the diameter of the rest needed to prevent depressions. The rest also provides a smooth, easy sliding surface to the furniture, so that the floor finish is not scratched or marred by furniture movement.

## idea

### Machines make wrapping material from used cartons

Two new machines cut and crimp used and old shipping cartons into pliable wrapping and packaging material. Eliminating the cost of new wrapping material, the machines are capable of providing the user with a saving upwards of 25% of packaging costs.

Used containers are first flattened out. They are cut to desired dimensions in the cutting machine, and then crimped in the crimping machine.

Results of several installations show that heavy-duty corrugated board can be bent, folded, or rolled easily, and yet retain all of its original toughness.

(Circle 746 for more information)



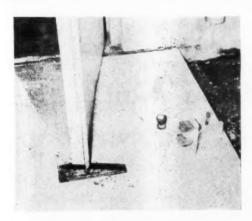
It provides greater protection against breakage, and users have reported fewer damage claims and have less returned merchandise.

The machines have also stepped up output in packing and shipping departments because the packing material is constructed "to measure" to meet individual needs.

For more information, circle number 837 on the Reader Service Card.

### Magnets replace old-fashioned door stops

To bring the "overhead" down on plant and office doors, the Carboloy



Department of General Electric Company, Detroit, uses magnetic door stops. Substituting a magnetic door holder eliminates the old-fashioned wedge.

Including a "rough" horseshoe magnet and aluminum brackets, plus labor, the whole "home-made" installation costs about \$20. The magnetic holder it is estimated, will double door life and smooth traffic flow. The magnet idea also can be applied to wooden doors by installing a metal plate on them as a contact.



#### STEEL AGE "1000" Line Desks

This desk line has brought Steel Age quality into thousands of offices where economy is an important consideration. It offers design and convenience features you'd expect to find only in much more expensive office furniture.

STEEL AGE "3000" Line Desks

Acknowledged as the finest steel desk line in America! Classically designed to lines that are both beautiful and practical, the "3000" Line has no equal in its unique combination of unexcelled craftsmanship and quality refinements that assure supreme comfort and efficiency.

STEEL AGE "Correlation" Line Desks

Think of versatility . . . and you think of Steel Age Correlation! Here is the exciting new concept in office planning thousands of business men are turning to. For Correlation offers new beauty, new convenience and, most of all, amazing new adaptability through expandable, correlated construction.

WHENEVER you buy a Steel Age Desk, please remember this: Whatever model you buy whatever price you pay . . . you're investing in an uncompromising standard of quality in construction and performance. Dollar-for-dollar, no other steel desk in America can offer you more comfort, more convenience, more efficiency, more sheer value.

But only by seeing these fine desks can you begin to experience the immeasurable pride of owning the finest desk in its class. Your Steel Age Dealer's is the place to go. Why not today?



CORRY-JAMESTOWN MFG. CORP., CORRY, PA.

Branch Offices: Atlanta · Boston · Chicago · Dallas · Detroit · New York · Oakland · Philadelphia · Seattle

(Circle 712 for more information)



# Autographs Easier, Faster and Safer to mount than any other Property Tag"

SOV MAINTENANCE SUPERVISORS

"Easier and faster to mount because of labor-saving solvent-activated adhesive backing ... effective on almost any surface, too. Safer because tools, tacks or screws aren't needed...no danger of damage to internal mechanisms of precision equipment. Eco-nomical, too, because special skill isn't required."

"SERIALLY NUMBERED AUTO-GRAPHS" are produced from lustrous. ole" Satin Finish Aluminum. They're more durable than foil or paper labels... much more impressive in appearance, too, You'll like the legible numbers, the colorfully lithographed copy and the clear baked lacquer overcoating.

SIMPLY ACTIVATE ADHESIVE BACKING



PRESS INTO PLACE



WRITE TODAY for samples and FREE book-let, "HOW TO PER-FECT PROPERTY CON-TROL."

METALERALT INC. MASON CITY, IOWA, U.S.A.

(Circle 735 for more information)



(Circle 705 for more information)

Warsaw, Indiana, U.S.A.

### How to make the RIGHT decision

Making good decisions in business involves seven fundamental steps, according to a group of corporate officers who explored the decision-making process in a workshop conducted by the New York Adult Education Council. The fifteenman group, experienced in making decisions at the highest levels of business organization, outlined the following approach to be used in making better individual decisions:

> 1. Determine the problem or the opportunity.

2. Evaluate the situation in terms of its scope, your individual responsibility, other people involved, and company policy.

3. Analyze the situation in terms of available facts, information sources, precedent, your empirical knowledge, competitive factors, possible alternatives, and creativity.

4. Consider the emotional climate and physical environment involved, and the problems present of status, skill, competency, coordination, and communication.

5. Decide carefully what ultimate purpose will be served by the decision. 6. Do not fear responsibility for what you decide.

7. Never default; make the decision.

To help executives on the way up to make good decisions, they suggested the following approach:

> 1. Create a receptive atmosphere within the over-all organizational structure.

> 2. Make the company's policies and broad objectives known.

> 3. Delegate responsibility and equivalent authority unrestrictedly.

> 4. Maintain constant contact at all work levels through an efficient communications system.

5. Exercise leadership as a function, not as a psychological trait.

6. Manage from the viewpoint that praise or blame is a group, not an individual matter.

7. Assign individual status according to the degree to which an individual contributes to the over-all purpose of the group. m/m



Photo taken at Jackson & Perkins Co., Newark, N. Y.



### The Denominator goes to work for JACKSON & PERKINS!

Each unit of the 500-unit Denominator shown above represents a particular type of rosebush. As each order is received, it is tabulated on its respective unit. Order tabu-

lation is greatly simplified—no pencil or tally sheet necessary! The total shown on each unit indicates the number of plants sold-and when deducted from stock on hand-provides running inventory control!

The Denominator can be made up in as few or as many units as you may require. Consult us for your particular needs, without obligation, write Dept. MM-53.



(Circle 715 for more information)

### If you want more information

V on any product or service described in MANAGEMENT METHODS, just circle the key number on the postage paid Reader Service Card bound into this issue and fill in your name, address, etc. If an item has no key number, merely state the subject matter in the space provided on the card.

jui



need changing, too.

Apsco now offers a revolutionary new development in pencil sharpener

maintenance . . . The "complete" cutter head assembly.

Now, in one convenient, clean operation, office personnel can revitalize their pencil sharpeners in seconds. Order an adequate supply from your stationer today.

Specify, too, Apsco Pencil Sharpeners, Staplers, and Punches. It costs less to buy the best.





### Apsco products inc.

P.O. Box 840 Beverly Hills, Calif. Factories: Rockford, Ill. . Toronto, Canada

(Circle 704 for more information)

### DOES YOUR OFFICE PERSONNEL KNOW · · HOW

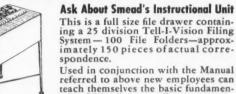


TO FILE?

This INSTRUCTIONAL MANUAL is designed to present the fundamentals of filing for class or self-instruction.

### Get This Manual Free!

Special accent has been put on application to typical everyday office filing problems. Rules are reduced to utmost simplicity. WRITE DEPT. R



tals of filing in your office. SMEAD MANUFACTURING CO. INC. HASTINGS, MINNESOTA

(Circle 754 for more information)

IMPORTANT NEW DEVELOPMENT BRIDGES THE GAP BETWEEN

### **Duplicating** ₹ Copying

Let's suppose a complimentary letter arrived on your desk today from an important customer. You'd like to make about 75 copies to distribute to your salesmen to carry as testimonials. You want them right away-since they are valuable as sales ammunition.

You have several choices as to how you will get your copies, depending upon the reproduction equipment used by your firm. If you have a copying machine (Diazo, Whiteprinting, Photocopying, Xerographic, etc.), they can be run off. Since this equipment copies exactly what it sees, it will also reproduce your customer's letterhead and signature. If you haven't a copying machine but do have a spirit duplicator, you can have a copy typed and run off in the necessary quantity. These duplicates will not carry the letterhead and signature, however.

If your firm has an offset press, you can create an offset master and run off the number of copies you need. In this case, of course, you will also get the letterhead and signature. Similar results can be obtained with scanning devices to produce a master.

#### The new intermediate bridge

The new process is an extension of Xerography and spirit duplicating. It permits you to create a spirit duplicating master that is an exact copy of the original. This master can then be run off on any spirit duplicating machine. It will reproduce both letterhead and signature, formerly an impossibility on a duplicating machine. Capacity for such a master is 50 to 100 copies.

### What should management buy?

It is becoming increasingly difficult for a businessman to select the "right" equipment for his firm. Copying machines will do jobs that are impossible on duplicators. Duplicators have an economy factor that few copying machines will approximate when quantity is a factor. Yet, the new intermediate step, in all probability, will only further complicate the businessman's choice.

Perhaps the best rule-of-thumb that can be applied is to avoid a search for an "all-purpose" system. Nothing short of a full investigation of all necessary and potential applications within a firm will provide an answer. Even then, many companies will discover that they can justify multiple installations of various copying and duplicating methods.

For more information and free literature on the new copying process, circle number 844 on the Reader Service Card.

### it's time to change to Del-e-tape!



When last-minute changes come up, you'll be glad your office typewriters are equipped with Del-e-tape ribbons. Because when using Del-e-tape ribbons, whole words and sentences can be quickly taken out with Del-e-tape deleter.

Just touch the liquid to the paper and-presto!typing completely vanishes. No smudging, no scrubbing with erasers, no crumbs to dirty machines. Re-type on the same space without a trace of a change. You get a better job in less time.

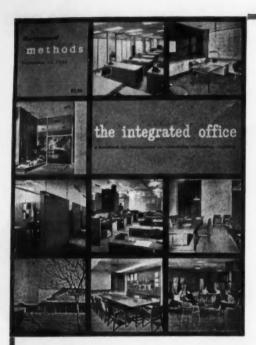
Del-e-tape types clean and sharp—is permanent in type. Fits all standard and electric typewriters. 30-day money-back guarantee. Be convinced-order today!

If your dealer cannot supply you, use coupon order form.





	DUCTS COMPANY, INC B, Hicksville, N. Y.		PRICE LIST Standard Typewriters
Please enter RIBBON and	our trial order for DEL-E DELETER.	-TAPE	Each \$ 1.5 1 Dozen 13.5
Quantity	Make of Typewriter	Color	IBM Electromatic
	DEL-E-TAPE Deleters.		Each \$ 1.7 1 Dozen 16.5
			Del-e-tape DELETER \$.50 Each \$5.00 doz
Firm Name .			E-3
Address			*******



The only publication of its kind

a handbook for management on office remodeling, relocating, building

### the integrated office

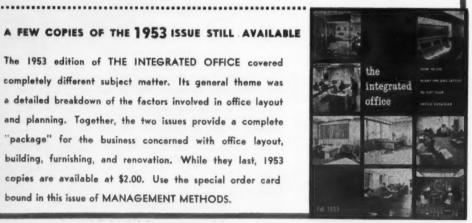
If you have been thinking about remodeling, moving, enlarging your offices, here's a practical, down-to-earth guide that will save you hours of trial and error planning. The 1954 issue is crammed full of solutions to management's most pressing problems:

> How to select new quarters How much does it cost to move How to modernize on a long-term plan How much does it cost to redecorate How to handle sale and lease-back of property How to expand an existing building

Each of these questions—and this is only a partial table of contents—is written by a recognized expert in terms of his experience with well-known firms. Dozens of photographs and plans guide your selection to the proper solution to your needs. To order, use the postage-paid order card bound into this issue. We'll bill you later. only \$2.00

#### A FEW COPIES OF THE 1953 ISSUE STILL AVAILABLE

The 1953 edition of THE INTEGRATED OFFICE covered completely different subject matter. Its general theme was a detailed breakdown of the factors involved in office layout and planning. Together, the two issues provide a complete 'package" for the business concerned with office layout, building, furnishing, and renovation. While they last, 1953 copies are available at \$2.00. Use the special order card bound in this issue of MANAGEMENT METHODS.



### Should overtime exempt personnel receive extra compensation?

инининия Most companies compensate their overtime-exempt employees for hours worked beyond the normal time. Although their systems for payment vary, the majority of 31 companies questioned by the Associated Industries of Cleveland reported that they do recompense overtime-exempt supervisory, technical, and office personnel. Only seven companies said they did not pay any overtime to exempt workers. The remaining 24 firms use a variation of five basic payment systems.

- 1. Sliding scale. Five companies pay time and a half for hours which exceed the maximum set by the company, according to the employee's base salary. Nine gradations were reported, ranging from 42 to 58 hours per week, with salary from \$357 to \$557 per month. The scale might read as follows: time and a half for work after 50 hours for those salaries up to \$457 per month.
- 2. Percentage. Four companies pay an exempt foreman 10% of salary for overtime if he works 48 hours per week. If he works 56 hours, he will get 20% of his salary as overtime payment.
- 3. Time and a half. Eight companies pay time and a half for every hour worked past the 40-hour work week. This is paid on the base salary to all, including exempt employees.
- 4. Straight time. Six companies pay the regular hourly wage to all employees (including those in the exempt group) for time worked past the 40-hour week.
- 5. Pre-set compensation. The one remaining company pays a pre arranged amount to foremen working overtime. For example, if a foreman works eight hours overtime, he receives \$23. He receives more on a descending basis for time past the eight-hour mark.

Each of the companies makes varying stipulations in connection with Sunday work, maximum earnings per worker, office worker payment, etc. m/m



How centralization and electronic systems result in

### One-day

1. KEY PUNCHING



### order

2. ACCOUNTING



### processing

3. BACKLOG FILING



june 1955

Complete centralization of all order-handling and invoicing has resulted in one-day order processing. The Delta Power Tool Division of Rockwell Manufacturing Company eliminated the order-billing bottleneck that plagued their sales department. In addition, management is supplied with proven daily reports on both orders and shipments.

They gathered all order and invoice writing from Delta power tool orders from field offices, and centralized them at national headquarters. The company was able to replace repetitious, manual, paper work processing with electronic machinery keyed to a simplified, common-sense, work flow plan.

Using a programmed tape prepared from pre-punched cards for teletype transmission, teletype orders are produced in finished form without complete manual typing at any order-handling stage. Because the tape is preprogrammed, the order information is transmitted in such a way that it automatically appears, properly spaced, on regular order forms—six at a time.

### Nine operations reduced to three

By careful scheduling of work flow to avoid duplication and waste motion, and by performing repetitive operations electronically, Rockwell has reduced manual processing on orders and invoices from nine separate operations to three. Of these, only the bill of lading must be prepared on a typewriter. The other operations are simple punching and mark-sensing (noting quantity with conductive pencil) punched cards.

A significant reversal of procedure is advance preparation of the punch card used in processing source documents and preparing statistical reports. Wasteful duplication is avoided by providing order and invoice information from a single source, as well as statistics of orders entered and shipments billed.

Customers now send their orders directly to the central office, rather than to district offices. There, they are registered and edited by order editors. In



### INSTALVELOPE

ENDS BUDGET ACCOUNT HEADACHES FOR YOU-AND YOUR CUSTOMERS!

### Speeds Budget Collections:

Payment Coupons with envelope attached are bound in Customer's Payment Record Book and provide immediate and positive identification of account and excellent posting

### Experience has proved use:

- I. Increases payment on due date by average of 3 days per payment.
- 2. All information available for crediting
- 3. Eliminates correspondence and errors
- 4. Customers like courtesy, efficiency and

#### **Advertises Your Products:**

Provides powerful and economical means of advertising your other products and services to a known and complete "captive" audience at pre-determined intervals throughout the

Thousands of Instalvelopes in use from coast

Write or wire us for sample Book a complete information:

EFFEC	11VE 100	LS FOR I	FFECTIVE	MANAGEM	M
					- 19
WAS	ZETT	URGA	NIZATII	JN, IN	C.
Est.				1	
WEST	PORT 3		1	CONNECTI	CUT

Tear Off

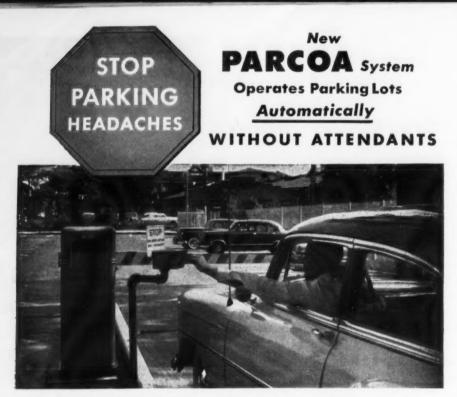
Please send me without obligation, sample book and complete information.

NAME ......

COMPANY ..... ADDRESS .....

CITY & STATE .....

(Circle 765 for more information)



Here's the practical solution to today's parking problems, as already proved in actual service at hospitals, schools and other institutions, municipalities, industrial plants—wherever private parking facilities must be maintained.

The amazing new PARCOA system does the job safely, economically and dependably-without attendants. A simple electrical mechanism controls entrance and exit gates, actuated by card-keys\* issued only to authorized holders.

PARCOA equipment is low in first cost. Easy to install. Requires minimum maintenance. No attendants needed. No help problem. Pays for itself through savings. Coded card-keys can be changed as desired.

Write today for illustrated brochure and name of nearest distributor. Technicolor sound film available for private showing to your group.

card or any combination) m this system readily adapt



### PARKING CORPORATION OF AMERICA

Division of Johnson Fare Box Company Revenue Collection Specialists Since 1909 4619 North Ravenswood Avenue, Chicago 40, Illinois

Sales and Service Offices in Principal Cities listed under BOWSER, Inc.

(Circle 745 for more information)

### Binders for Management METHODS

Here's a specially designed binder that will hold 12 issues of Management METHODS without crowding. Looseleaf, pages open flat, with no part of the gutter of a page hidden from view. The maroon, leather-like hard cover The maroon, leather-like hard cover allows volumes to be stored "on Spartan end" in your bookcase.



Single binder price is \$3.95, postpaid. Or, if you have back issues on hand, save a dollar by ordering two for only \$6.95, postpaid.

Check or money order must accompany your order to:

STATIONERS, INC.

141 East 44th St., New York 17, N. Y.

the order-writing area, pre-punched cards containing customer name, address, and shipping-charge information are pulled from a tub file. These are matched with another set of prepunched product description cards and miscellaneous data cards key-punched with all the information pertinent to the specific order.

Quantity of units is mark-sensed on the product card by pencil at the same time the latter is verified to the customer's order. As a means of ready identification and accurate pricing, all cards are color-coded or similarly marked. The advance gang-punching of cards has been found to be a major means of eliminating repetitious typing of constant information.

Cards containing all order information are next fed into a card-to-tape machine which prepares a five-channel punched programming tape. Pre-programming the tape puts information on the order form in the proper location to produce six separate forms, an efficient "double-use" of the teletype transmission equipment.

#### Receiving apparatus at warehouses

The tape controls the teletype transmitter, which operates continuously from one order to the next. Sending apparatus produces three copies for customer acknowledgement, while hundreds of miles away, the receiving apparatus in a company warehouse simultaneously produces three copies for shipping paper. Component parts description numbers are printed on the shipping copy from information in the tub file in the central office, instead of typing them in at the warehouse. Because shipping papers contain this information, they are not added to the bill of lading.

When the shipping order is received by mail from the warehouse, the numerical file is relieved of all papers for complete shipments, and the numerical copy of the order goes to the order editors along with a copy of the warehouse transmittal. The shipping papers then go to the backlog tub file, where the original pre-punched card is held pending return of the shipping papers.

Where only partial shipment has been completed, product cards are



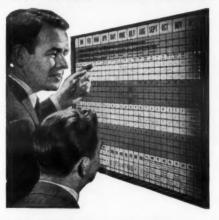
### IN MINUTES IN 1 to 5 COLORS

Now, you can make 120 or more copies per Now, you can make 120 or more copies per minute of anything up to 9 x 14 inches in size — typed, written, drawn, traced or ruled — in 1 to 5 colors. All in one easy, inexpensive operation. The Heyer Conquerors, Manual and Electrically Operated, are the duplicators with ALL the features . . . priced much lower than comparable machines. Model 70-Hand Operated-\$195 (plus tax)

Model 76-Automatic Electric-\$325 (plus tax) Write today for FREE descriptive literature and name of your nearest dealer-to:

#### THE HEYER CORPORATION 1832 S. Kostner Ave., Chicago 23, III. (Circle 728 for more information)

### You Get Things Done With **Boardmaster Visual Control**



- A Gives Graphic Picture of Your Operations-Spotlighted by Color
- A Facts at a glance—Saves Time, Saves Money, Prevents Errors
- ☆ Simple to operate—Type or Write on Cards, Snap in Grooves
  ☆ Ideal for Production, Traffic, Inventory,
- Scheduling, Sales, Etc.

  Made of Metal. Compact and Attractive.

  Over 50,000 in Use

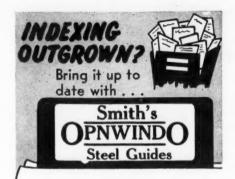
Complete price \$4950 including cards



24-Page BOOKLET NO. M-300 Without Obligation

Write for Your Copy Today **GRAPHIC SYSTEMS** 55 West 42nd Street . New York 36, N. Y.

(Circle 724 for more information)



Ideal for expanding out-grown filing systems. This movable clamp-on guide has 1001 other office uses to save time and improve your filing.

Available in 1 or 2 inch widths. Packed 25 to box with labels in strips for easy typing. Also alphabetic labels to 200 subdivisions.

See Your Office Supply Dealer or Write

### CHARLES C. SMITH, INC

EXETER. NEBRASKA

For More Than 50 Years a Complete Line of Time-Saving Signals and Indexes

(Circle /55 for more information)

### HAVE YOU HEARD ABOUT . . . HAVE YOU SEEN CONVOY "Chem-Board"\*

RIGID, PERMANENT, INEXPENSIVE



### record storage FILES

Chem Board storage Files are permanent. They cost and weigh about 50% less than steel; cost less than some corrugated paper They're shipped assembled, ready for

\*CHEM-BOARD is the product of Convoy's chemical impregnating process that makes corrugated board flint hard rock strong.

#### CONVOY

also makes a complete line of Tote Boxes, used by famous names in all types of



WRITE FOR COMPLETE INFORMATION

P.O. Station B, Box 216-M Canton 6, Ohio

(Circle 711 for more information) june 1955

separated by items shipped and items not shipped. Shipped items are processed for invoicing; unshipped items are put through the system again, and a new tape is prepared to have the order placed again, possibly in another warehouse, for the next shipment.

Shipped items are processed for invoicing by putting the original prepunched cards through an accounting machine, extending for totals, numbering, dating, and preparing a seven-part invoice automatically. These cards are also used to prepare statistical reports of shipments billed.

A double-check on billings is provided: Invoice tabulations arrived at on the printing machine must match

### Efficiencies and economies of centralized electronic processing

Improve accuracy by minimizing chances for human error and thus provide better service to customers.

Speed and simplify collections and issuance of credits and debits.

Control and balance inventories and production scheduling.

Level substantially the mountain of correspondence between sales offices, headquarters, and plants, thus reducing operating costs.

Spread the peak load of accounting and paper work processing.

totals indicated by the calculating machine. These totals are then compared with the corresponding totals on the accounts receivable form.

Basic operational advantages of the system have already been demonstrated through accuracy on price information, catalog numbers, product descriptions and invoicing of items in accordance with the customer's order. Product analysis billing for sales credit requirements has been reduced, as have time requirements to allocate billings properly. Advantages of the "paper work production line" are so apparent to Rockwell that a similar plan is, at this time, being considered for its Meter and Valve Division. m/m

# IRY, IT FREE



We say: Put the Underwood Sundstrand Adding Machine through its paces in your own office for 5days FREE. Give it the most rugged workout you can for speed, ease of operation and dependability! Test it thoroughly ... and we're betting that, like others who

have used adding machines for years, you'll prefer the Underwood Sundstrand. Write today on vour business letterhead to Underwood Corporation, Dept. D-11, One Park Ave., New York 16, N. Y. for a FREE trial of an Underwood. Sundstrand. Do it right now!

UNDERWOOD UNDERWOOD CORPORATION

One Park Avenue, New York 16, N. Y. (Circle 762 for more information)



FINDER!

A New Filing Concept Giving You A **Unique Combination of Advantages:** 

The proven space-saving, speed and economy of open-shelf filing. Record protection from dust, dirt and fire equal to that of drawer files. Pull-out work shelves for file maintenance and notations.



For full details about Space Finder File and our other new equipment for the of-lice, write for Catalog No. 6 as well as the name of your local representative.

PUNCHED CARD USERS

PRODUCTS CO. — 57 Post St., San Francisco 4

(Circle 757 for more information)

### DELIGHTED!

### MY BOSS BOUGHT NCR\* PAPER



Now our marginal punched tabulating forms work smoothly without the irksome job of decollating and disposing of carbon. These Egry NCR forms are clean. There's no carbon to wrestle with and that saves me clean-up trips to the washroom.

Egry business forms printed on NCR (No Carbon Required) paper are available for all types of systems. You'll be delighted too, with clear, sharp copies, ease of handling and time saved. Try the advantages of less bulk in your business forms.



### THE EGRY REGISTER COMPANY . DAYTON 2, OHIO

gar a region to	Send for a free strip of tabul stock forms on NCR paper sample kit. Mail this coupon
	COMPANY — Dayton 2, Ohio sample kit of Egry NCR paper.
COMPANY	
ADDRESS	
	ZONE STATE
CITY	TONE STATE

### New low-cost, speedier eograph ste

A new, fast, and inexpensive method makes offset printing plates photographically from any original. The manufacturers claim plates can be ready for the press in one-third the time, at one-half the plate cost, and one-tenth the equipment cost of the fastest existing method.

photo-offset plate making method

A unique feature of the system is that the original from which the paper offset plate is to be made can be printed on both sides or can be of heavy card stock. This is possible because light does not pass through the original during the plate making process.

Four prominent manufacturers have joined together to produce the system. A transfer process is the heart of the new system, along with a new offset plate.

The original copy is placed in contact with a matrix sheet for an exposure of a few seconds. After immersing the matrix sheet in an activator solution for about 30 seconds, it is placed on the plate, and the two are squeezed together. When the



matrix sheet is peeled off the plate, a blackened copy of the original will remain on the plate. After sponging the surface of the plate with an etch solution, the plate is ready for the press. Plates made in this manner are capable of producing upwards of 5,000 copies, with no loss of quality.

For more information, circle number 840 on the Reader Service Card.



### Sprayed-on acrylic coating preserves mimeograph stencils

An acrylic coating sprayed onto mim-

eograph stencils results in sharper and clearer reproduction of type. The coating also preserves stencils for future repeated use. Stencils can be stored for as many as 18 months and, the manufacturer claims, will reproduce as sharp as when they were first run. The actual spraying operation takes about 30 seconds, and dries in a matter of minutes.

For more information, write to Krylon, Inc., 2038 Washington Avenue, Philadelphia, Pa.; or circle number 841 on the Reader Service Card.



### Start-stop tape transport used for computer memory storage

A high-speed, start-stop tape transport is suitable for use as an auxiliary memory storage device in computers or data reduction systems. The new magnetic recorder-reproducer can be mounted on a 19" relay rack. The unit has a tape speed of 75 inches per second in either direction, and will accommodate tapes varying in widths from one-quarter inch to a maximum of two inches.

To insure fast starting and stopping, the unit is designed so that there would be a minimum of effort in overcoming the inertia of the moving parts. To help accomplish this, the tape is stored in a basket. During the operation it is dropped into another, which makes it necessary to accelerate only the mass of suspended tape. In acceleration, all rotating parts



ating sprayed onto mim-

N

T.



### RITE-LINE COPYHOLDER

**Promotes Accuracy - Increases Production** 

PRICE INCLUDING
NEW TELESCOPIC
EYEGUIDE



TELESCOPIC EYEGUIDE
Accommodates all widths of copy from a machine
tape to 20 inches.



EYEGUIDE EXTENDED

FREE TRIAL OFFER Write, asking us to send you a
RITE-LINE Copyholder with the understanding you may
return it without charge within ten days.

RITE-LINE CORP. 4209 39th Street, N.W. Washington 16, D.C.

(Circle 750 for more information)



EXECUTIVES: Your stylish "traveling office", for reports, letters, minutes.

SALESMEN: Carry price books, photos, testimonials, samples, other sales data.

HOME "MANAGERS": Perfect for household papers—bills, budget, taxes, insurance. Made of lightweight steel, tan finish. Brass lock, leather handle, piano-hinge. Holds 25 Pendaflex celluloid-tab hanging folders, which can't slump or sag. Clip for free catalog, name of dealer.

Oxford Filing Supply Co., Inc.
25 Clinton Road Garden City, N.Y.
(Circle 743 for more information)
june 1955

are kept running at full speed at all times. A tape storing reel is provided when the tape is not in use. Basket storing is not recommended.

For more information, write to Brush Electronics Company, 3405 Perkins Avenue, Cleveland, O.; or circle number 843 on the Reader Service Card.



### New dry process machine makes eight copies at one time

A new model xerographic processing machine makes eight permanent copies from a single exposure. Multiple copies,



translucent copies, and offset paper masters can be made with the same equipment.

An opaque, translucent, or two-sided original copy can be used. The copies can be made on any type of paper or card stock.

For more information, write to The Haloid Company, 556 Haloid Street, Rochester, N. Y.; or circle number 836 on the Reader Service Card.



### Electric calculator for payroll and invoicing

A new electric calculator is particularly adaptable to payroll and invoicing work. It features an extra "memory" register for

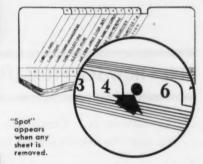




ACCOUNTING
FORM FEATURES
THAT WILL MAKE
YOUR FORMS MORE
USEFUL and MORE
...PROFITABLE!

### SPEEDEX

Speedex is a visible tab cut index designation applied to the form itself. Ideal for General Ledgers, Installment Loan Ledgers, etc. Speedex lends itself to all types of indexing—numerical, alphabetical, terminal digit, commodity, code, subject or classification.



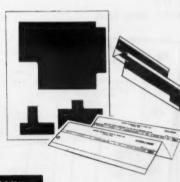
### X-RAY SORT

The X-Ray Sort Feature is provided on forms which are to be grouped into various classifications, or individually sorted alphabetically or numerically. The form can be marginally punched on any or all sides, with printed designations for each hole. Proper holes are punched open to permit needle sorting.



### WAX CARBON SPOT

Wax Carbon Spots of every size and shape can be used...and hard or soft carbon in heavy or light coatings are available to assure a legible impression on all of the multiple copies. These hot wax carbon spots may be placed anywhere on the sheet so only the information desired will pick up on the various copies. The messy, timetaking, insertion and removal of carbon sheets is entirely eliminated.



WRITE FOR SAMPLE PACKET "A"

### LOAN-A-MATIC

For maximum efficiency in your loan department. Simultaneous scheduling of ledger and coupons reduce 7 operations to 1. Loan-A-Matic speeds customer service, reduces operating costs and eliminates transcription errors. Provides custom-made coupon books, faster sorting of coupons and identical records for you and your customers. Descriptive literature available.

REPRESENTATIVES
IN MOST
PRINCIPAL CITIES



(Circle 733 for more information)

automatic grand and net totals, automatic accumulation, subtraction, and "full cent." The calculator is claimed to increase production and cut the error contingency factor substantially.

For more information, write to Plus Computing Machines, Inc., 5 Beekman Street, New York, N. Y .: or circle number 848 on the Reader Service Card.



#### Adding machine features new "memory" device

A new, 10-key adding machine with a "memory" feature simplifies multiplication with a Recall Key. This is valuable in correcting errors caused by any improper indexing.

With the Recall Key, any credit or debit entered in error can be recalled and eliminated. The erroneous figure can also be reversed by pressing this key simultaneously with the proper motor bar. The computer also features automatic step-



over multiplication with a positive back spacer. Short-cut multiplication can be easily achieved by combining this with the Recall Key. It is useful in computing pro-

Indexing is simplified with double and triple cipher keys which make it possible to print six figures with three key depressions instead of six. The machine has a light touch, for fast, easy operation and is

For more information, write to the R. C. Allen Business Machines, Inc., Grand Rapids, Michigan; or circle number 842



#### Cold type composing offers inexpensive display composition

Using cold type for display composition saves time and money by eliminating paste-up and mechanical devices. A recently redesigned version of cold type provides automatic type spacing dimensions and eliminates edge lines, fogging, retouching, and opaquing.

Each character is bonded to an individual piece of translucent vinyl acetate and is self-adhering. The letters cannot nick or scratch and can be used over and over again. Sizes and styles vary.

Also available is an entire composing kit, including copying board, triangles, Tsquare, composing beds, and trays.

For more information, write to the Davidson Corporation, 29 Ryerson Street, Brooklyn, N. Y.; or circle number 835 on the Reader Service Card.



### New steel transfer files offer space economy

A new, low-cost line of steel transfer files offers maximum savings in storage room space. Simple in design, the files

ratios, payroll taxes, etc.

smooth and quiet.

on the Reader Service Card.





142 Federal Square Bldg. Grand Rapids, Michigan

judge a product's

alue by its price That's why they're

shocked by

WALLS

Soundex Walls

cost less . . . but do more:

They soak up

office noise

like blotters soak up ink!

\*Write for your

free catalog . . . judge by value

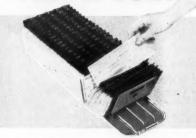
as well as

low price.

SOUNDEX

The Curse of a

LOW PRICE .



. . . the Easy-Action vertical paper sorter that answers the need for sorting efficiency in any business having large or small sorting problems. Every Vert-A-Sort Installation made has resulted in increased production, no matter what sorting methods were used before!



... made in a variety of sizes, all of which can be indexed to suit your needs. Built for years of

for Complete Details



(Circle 731 for more information)

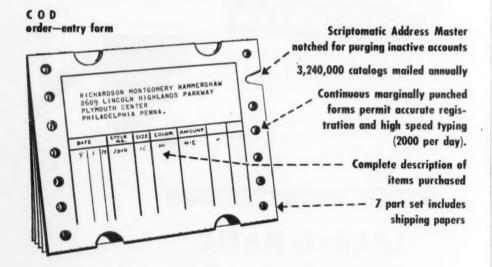
### HERE'S HOW SCRIPTOMATIC HELPS A MAIL ORDER COMPANY

### Scriptomatic Can Help You, Too ... to get flexibility and low cost in your address masters.

A mail order house with 810,000 active customers and \$7 million annual volume installed the Scriptomatic system to gain substantial benefits not obtainable by any other means.

In one brief writing operation, using Standard Register continuous forms on electric typewriters, they create both a Scriptomatic addressing machine master and a separate set or sets of shipping papers. Since the master is an inexpensive by-product of the typing operation they simply discard it when a new order comes in from the customer. These card masters minimize checking problems and improve accounting and catalog mailing procedures. They are housed in one fifth the space required by former address masters. Most important, in 15 minutes after mail is opened a processed order can be in the hands of the "pickers."

Deriptomatic



Write for actual case studies and descriptive material. Discover now, at no obligation, if Scriptomatic can improve your specific procedures.

SCRIPTOMATIC INC.

310 North 11th Street, Philadelphia 7, Pa.

(Circle 752 for more information)

feature heavy interior reinforcing, which adds strength and stability. There is no need for external reinforcing, and outside height and width of files are held closer to record sizes. Racks and shelving are completely eliminated since loaded files weighing an average of 80 pounds can be stacked ceiling-high with no drawer bind.

Units can be locked together, without tools or locking keys, securely and automatically, as they are stacked. Only pronged tie-links are required for side-to-side or back-to-back connection. This prevents both tipping and lateral movement when loaded drawers are pulled out or suspended.

The steel transfer files are equipped with positive drawer stops, drop bail handles, and card holders.

For more information, write to York Safe & Lock, 818 Mulberry Road, S. E., Canton, O.; or circle number 847 on the Reader Service Card.



### New positive image film of clear cellulose acetate

A new film, called "reversal foil," produces a positive image directly from a negative, bypassing photographic processing steps. The product, a clear cellulose acetate, can be exposed and developed in seconds on a whiteprinting machine. Like all translucencies, it can then be used to reproduce any number of copies.

The reversal foil will give positive reproductions of transparentized photostats



and blueprints, as well as film negatives. Line, halftone, or continuous-tone originals can be copied quickly and with comparatively little expense.

As part of office duplicating, the film is ideal in making positive aluminum and paper offset plates for longer runs. Printers and photographers can use the film as an excellent intermediate for proofs. In the visual field, it is used to prepare film transparencies for overhead projectors.

For more information, write to Ozalid Division, Johnson City, New York; or circle number 834 on the Reader Service Card.

# New MARATHON BLACK HECTO MASTERS are clean



The unpleasant stain and smear that once was the trademark of hectograph spirit duplicating is rapidly becoming a thing of the past—thanks to Columbia research and development. New, Black Marathon Ready-Master Units are clean-clean because Columbia's exclusive ink does not "blossom" on contact with the skin-clean because protective Supercoating covers carbon surface and all edges. Yes, the results you can obtain from Marathon Black Ready-Master Units will prove how much Columbia engineering has advanced the quality of hectograph duplicating.

Use the coupon below attached to your business letterhead to obtain your copy of the Free booklet, "Quality Duplicating With Hectograph".

Columbia
RIBBONS - CARBONS
DUPLICATING SUPPLIES

COLUMBIA RIE CARBON MFG.	- Lander
Send book!	
Company	
Company	

(Circle 710 for more information)

### Free booklet available on practical embezzlement controls

A new booklet, entitled "Embezzlement Controls for Business Enterprises," is written by an authority on the subject of employee fraud prevention.

The booklet describes, in detail, practical methods of combatting embezzlement. It explains a fraud exposure program and advises on the control of cash receipts, cash disbursements, and merchandise embezzlements, detailing ideal systems of internal control and auditing.

For a free copy of the publication, write to the Public Service Division, Fidelity and Deposit Insurance Company, Baltimore, Maryland; or circle number 831 on the Reader Service Card.



### Free catalog illustrates protective covers for business machines

A complete line of protective covers for business machines and other office equipment is featured in a new eight-page catalog. The products include typewriter covers, business machine covers, cuff and sleeve protectors, fan and stool covers, aprons, and a new "fits all" cover.

A handy index printed on the front cover makes the catalog particularly convenient to use. It is fully illustrated and designed for quick reference. The catalog serves as a guide for proper maintenance of valuable equipment.

For a free copy, write to Budlew Products Company, 3535 West Cortland Street, Chicago, Ill.; or circle number 832 on the Reader Service Card.



#### Pressure-sensitive number tabs for easy indexing and filing

An expanded line of circular index number tabs can be used for all forms of filing, indexing, and cataloguing. These pre-perforated, pressure-sensitive tabs stick to any surface without moistening. They are easily picked up from the protective backing, and can be removed and transferred many times.

Printed in consecutive order, the clearly visible tabs number from 1 to 850. They are available in red, green, blue, orange, and black, for color-coded filing.

For more information, write to Universal Color Slides Company, 132 West 32nd Street, New York, N. Y.; or circle number 833 on the Reader Service Card.

# How you will save

# How your secretary will save...with Verifax copying

- ☐ You'll seldom have to dictate another letter which, for the most part, quotes one you have received.
- ☐ You'll end slow "one-copy" routing.
   ☐ You'll never be short of copies at meetings.
- ☐ You'll never wait for extra carbons to be typed . . . or for your "only copy" to be returned.
- ☐ You won't have to send your records out of the office to be copied.
- ☐ Your secretary can save a half-hour or more in copying just one report. She can make 3 Verifax copies in 1 minute for less than 4¢ each.
- ☐ She won't have to proofread. Verifax copies are photo-accurate.
- ☐ She won't have to take dictation and then transcribe.

In short, the savings for both of you will probably exceed the \$240



KODAK VERIFAX COPIER only \$240

——MAIL COUPON TODAY —— Eastman Kodak Company Business Photo Methods Div.

Rochester 4, N. Y.

Please send information about Verifax copying and names of near-by dealers.

		197
Name		
Position		
Company		_
Street		
City	State	Kodak
Price quoted is change without		nuuak

(Circle 7 8 for more information)

### Profit sharing accounting

How to streamline computing and recording operations

by Vance L. Desmond

Vice President, Detroit Trust Company

In today's modern offices, a time saving of even 5% is something to talk about. That's why we were excited recently when a new machine, on its trial run, cut 60% off the time required for the computing and recording operations involved in profitsharing plans.

In one operation, the machine computes the individual employee's share in the fund, issues his certificate, and posts his account. It formerly required the full time of one person, working five weeks, to complete a trust with 1,000 participants. Now, an operator working at the new typewriter-accounting machine can do the same job in only about ten days.

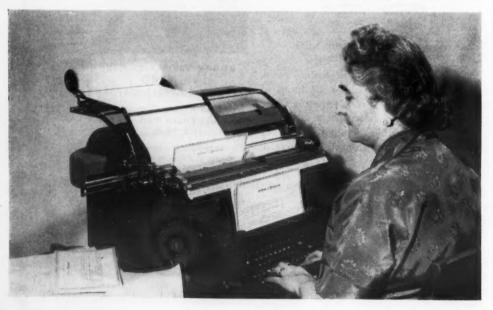
Much more important, this saving in time gives increased effectiveness to the plan itself. This machine makes it possible for the employee to see quickly and clearly a direct relationship between his efforts and his own monetary gain. Impressing this relationship on the employee, and the resulting favorable impact on production, is the key to the success of a profit sharing plan.

In addition to providing this important incentive, many companies enjoy substantial tax benefits at the same time, by assigning a fixed percentage of net profit to a retirement fund. The larger the profit, the larger the company's contribution. Under this arrangement, the participating employee collects his share of the fund at the time of retirement or disability, or he receives a fixed percentage of his share if he leaves before retirement age. In any case, the time when he actually receives his credited fund money is postponed, often for years. Because of this, keeping up interest in the plan, and thus keeping incentive alive, is a very definite problem.

#### Certificates build interest

One way to keep employee incentive high is to issue certificates which tell the participant exactly how much money has been credited to his account over a particular earning period. The

This machine posts the certificate of participation, the participant's ledger, and a balancing journal in one operation. Calculations are machine-made, thereby eliminating the human error factor.



sooner these certificates are issued, the more effective they are.

But this is no easy job. First, the participant's allocable share of the company's annual contribution, income from invested funds, revaluation of securities and redistribution of forfeitures resulting from severance of employment prior to retirement must be computed. And then profits and/or losses plus charges, if any, have to similarly be adjusted.

In the past, all these computations were made by calculator, with the amounts in each category being posted by hand and balanced to predetermined totals to check for accuracy. These computations often filled as many as 18 to 20 13-column ledger sheets and required many tedious hours to complete.

Certificates were then typed individually, and rebalanced to check with ledger records. Then record cards were prepared and checked. Costs of this complicated operation have risen so sharply recently that many companies have had to discontinue the issuing of certificates entirely.

Our new machine greatly simplifies this operation. Four constant factors can be locked into it. In our case, these usually are present value of securities, income, forfeitures, and current cash contributions from the company. Other factors are entered using the manual keyboard. Since these computations are machine-made, eliminating human error, five separate rebalancing operations of the old method are, therefore, avoided.

Calculations are made, ledgers and balancing journals are posted and certificates for employees are issued, all in one operation. After the data has been put into the machine, a skilled operator can complete all of these operations relating to more than 300 participants' accounts in one day.

As another step toward complete mechanization of this work, we are redesigning our employee certificates so that the name of the company and the employee can be inserted by an addressing machine. We believe this will cut additional hours off the ten-day record set this year. With this machine we now give greatly improved service to our profit-sharing clients. m/m

### **ADVERTISING INDEX**

Addo Machine Co., Inc	25
Addressograph-Multigraph Corp	10
Aetna Products Co.  Agency: Albert Frank-Guenther Law Inc.	49
All-Steel Equipment Co	45
Apsco Products, Inc	49
Arnolt Corp	48
Arnot-Jamestown Div.—Aetna Steel Products Corp. Agency: Alfred J. Silberstein, Bert Goldsmith, Inc.	4, 5
Art Metal Construction Co	27
Charles Bruning Co., Inc. Agency: H. W. Kastor & Sons Advertising Co., Inc.	23
Columbia Ribbon & Carbon Mfg. Co., Inc. 19, Agency: E. M. Freystadt Assoc., Inc.	57
Columbian Art Works, Inc	11
Convoy, inc	53
Corry-Jamestown Mfg. Corp	47
Cramer Posture Chair Co., Inc	32
Cummins-Chicago Corp	26
The Denominator Co., Inc	48
E. I. duPont de Nemours & Co., Inc Agency: Batten, Barton, Durstine & Osborn, Inc.	28
Eagle Pencil Co. Agency: French & Preston, Inc.	24
Eastman Kodak Co. Agency: J. Walter Thompson Co.	57
The Egry Register Co	54
Felt & Tarrant Mfg. Co. Agency: N. W. Ayer & Son Inc.	14
The General Fireproofing Co	2
The Globe-Wernicke Co	35
GR Products, Inc.	56
Graphic Systems	52
The Haloid Co	21
Harter Corp	44
The E. F. Hauserman Co	40
The Heyer Corp	52
Imperial Desk Co	29
International Business Machines Corp Agency: Benton & Bowles, Inc.	9

The Kohlhaas Co. Agency: Frank C. Jacobi Advertising	56
Lamson Corp.  Agency: Chapman Nowak & Assoc. Inc.	42
LeFebure Corp. Agency: Chester A. Ettinger Advertising	55
The McBee Co. Agency: C. J. LaRoche & Co., Inc.	12
Metalcraft, Inc. Agency: Altman-Gilbert Advertising	48
The Mills Co. Agency: Meermans, Inc.	38
Moore Business Forms, Inc.	6
Monroe Calculating Machine Co. Agency: L. H. Hartman Co., Inc.	60
P. O. Moore Inc.	29
National Cash Register Co. Agency: McCann-Erickson, Inc.	7
Outlook Envelope Co. Agency: Arthur C. Barnett Advertising	29
Owens-Corning Fiberglas Corp.  Agency: McCann-Erickson, Inc.	41
Oxford Filing Supply Co. Agency: Joseph Reiss Assoc.	55
Ozalid Div	59
Parking Corp. of America Agency: Fred H. Ebersold, Inc.	52
Philco Corp. Agency: Hutchins Advertising Co., Inc.	46
	. 29
Recordak Corp.— Subsidiary of Eastman Kodak Co	, 17
Subsidiary of Eastman Kodak Co	17
Subsidiary of Eastman Kodak Co	
Subsidiary of Eastman Kodak Co. 16 Agency: J. Walter Thompson Co. Remington Rand Inc. Agency: Leeford Advertising, Inc. The Reynolds & Reynolds Co. Agency: Weber, Geiger & Kalat, Inc. Rite-Line Corp.	18
Subsidiary of Eastman Kodak Co. 16 Agency: J. Walter Thompson Co. Remington Rand Inc. Agency: Leeford Advertising, Inc. The Reynolds & Reynolds Co. Agency: Weber, Geiger & Kalat, Inc. Rite-Line Corp. Agency: E. M. Freystadt Assoc., Inc. Rudd-Melikian, Inc.	18
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising	18 22 55
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp. 30	18 22 55 3 56
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.	18 22 55 3 56
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.	18 22 55 3 56
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.	18 22 55 3 56 , 31
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.	18 22 55 3 56 , 31 33 49
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.	18 22 55 3 56 , 31 33 49 53 52
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising	18 22 555 3 56 31 33 49 53 52 50
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising  S.P.A.—Workshop for Management 36	18 22 55 3 56 , 31 33 49 53 52 50 37
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising  S.P.A.—Workshop for Management 36  Tab Products Co.  Agency: H. M. Leete & Co.	18 22 55 3 56 , 31 33 49 53 52 50 , 37 53
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising  S.P.A.—Workshop for Management 36  Tab Products Co.  Agency: H. M. Leete & Co.  The Todd Co., Inc.  Agency: The Merrill Anderson Co., Inc.	18 22 55 3 56 , 31 33 49 53 52 50 , 37 53
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising  S.P.A.—Workshop for Management  36  Tab Products Co.  Agency: H. M. Leete & Co.  The Todd Co., Inc.	18 22 55 3 56 , 31 33 49 53 50 , 37 53 34 53
Subsidiary of Eastman Kodak Co.  Agency: J. Walter Thompson Co.  Remington Rand Inc.  Agency: Leeford Advertising, Inc.  The Reynolds & Reynolds Co.  Agency: Weber, Geiger & Kalat, Inc.  Rite-Line Corp.  Agency: E. M. Freystadt Assoc., Inc.  Rudd-Melikian, Inc.  Agency: Geare-Marston Advertising  Scriptomatic, Inc.  Agency: The Roland G. E. Ullman Organization, Inc.  J. P. Seeburg Corp.  Agency: The Buchen Co.  The Shredmaster Corp.  Agency: Cayton, Inc.  Smead Manufacturing Co.  Agency: E. T. Holmgren, Inc.  Charles C. Smith, Inc.  Agency: Ayres, Swanson & Assoc., Inc.  Spartan Stationers, Inc.  The Sturgis Posture Chair Co.  Agency: Blaco Advertising  S.P.A.—Workshop for Management 36  Tab Products Co.  Agency: H. M. Leete & Co.  The Todd Co., Inc.  Agency: The Merrill Anderson Co., Inc.  Underwood Corp.	18 22 55 3 56 , 31 33 49 53 52 50 , 37 53



How? Salesmen now write their orders on a translucent form. Prices, extensions and back orders are posted to this same form. Ozalid copies are made for Credit, Billing, Shipping, Inventory Control, Production and customer's confirmation. And the time saved is worth more than the payroll saving.

Thousands of firms have done away with wasteful retyping, rewriting, proofreading—save time, speed work, with Ozalid.

#### **Hundreds of uses for Ozalid**

An Ozalid machine also copies letters, memos, reports, written notes—and drawings, specifications, invoices, lists, ledger sheets, statements, shipping directions, schedules, tax reports, and 75% of incoming letters.

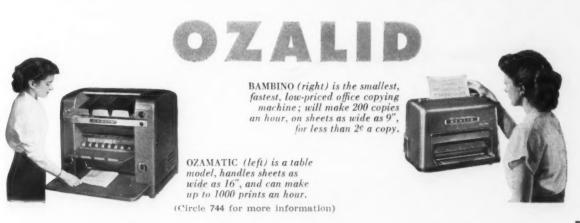
Not enough copies is costly in any office. Plenty of copies are always available with An Ozalid machine makes better copies, more quickly,

more economically than any office worker or any photocopying machine. It will copy anything written, typed, printed or drawn—on translucent paper that lets light through. Ozalid reproduction is instant—requires no stencils, negatives, darkrooms.

Ozalid prints are white, accurate, legible, dry, ready for use. A letter size copy is made in less than a minute, for under  $2\phi$ .

Ask the nearest Ozalid distributor (see phone book) to show you the Ozalid machine you should have...or write to 60 Ozaway, Johnson City, N. Y....In Canada, Hughes Owens Company, Ltd., Montreal.

Ozalid—A Division of General Aniline & Film Corporation... From Research to Reality!





combines streamlined appearance with modern, streamlined performance!

Here's the "new look" in the fully automatic calculator that's giving modern business unmatched efficiency. For the new Monro-Matic by-passes many needless steps, produces results directly, accurately. Yes, this years-ahead Monroe Model 8N brings \*Automation, the modern miracle of automatic operation that reduces figuring work to feeding figures . . . pushing buttons.

A sleek new beauty with functional design and scientific "color-guide" controls, the Monro-Matic flies through the toughest figuring job with incredible ease and speed. Ask your Man from Monroe to show you on your own figure work. His office is listed in your classified telephone directory. Call him today! Monroe Calculating Machine Company, Inc., Orange, N. J.

OPERATORS WHO KNOW... PREFER MONROE CALCULATING, ADDING, ACCOUNTING MACHINES

Acceptance under Section 34:64 P.L.&R. Authorized

Management

MANAGEMENT MAGAZINES, INC. 141 E. 44th St., New York 17, N. Y.